SAFETY DATA SHEET

AG108

Section 1. Identification

Product name	: AFTER GLO™ Polyurethane (Part A) White Base
Product code	: AG108
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Not applicable.	
Manufacturer	: THE SHERWIN-WILLIAMS COMPANY 101 W. Prospect Avenue Cleveland, OH 44115
Emergency telephone number of the company	: US / Canada: (216) 566-2917 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year
Product Information Telephone Number	: US / Canada: Not Available Mexico: Not Available
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Section 2. Hazards identification

OSHA/HCS stat		rial is considered hazardou 910.1200).	is by the OSHA Hazard C	Communication Stand	lard
Classification of substance or n	ACUTE TO SKIN COP SERIOUS CARCINC TOXIC TO SPECIFIC irritation) - SPECIFIC Category SPECIFIC Percentag Percentag	BLE LIQUIDS - Category 2 OXICITY (inhalation) - Cate RROSION/IRRITATION - C EYE DAMAGE/ EYE IRRI OGENICITY - Category 2 D REPRODUCTION (Unbo TARGET ORGAN TOXIC Category 3 TARGET ORGAN TOXIC 3 TARGET ORGAN TOXIC e of the mixture consisting e of the mixture consisting the mixture consisting	Category 2 TATION - Category 1 ITY (SINGLE EXPOSUR ITY (SINGLE EXPOSUR ITY (REPEATED EXPOS of ingredient(s) of unkno of ingredient(s) of unkno	RE) (Narcotic effects) SURE) (lungs) - Categ own oral toxicity: 38.20 own dermal toxicity: 42	- gory 1 % 2.6%
GHS label elem	<u>ents</u>				
Hazard pictog	rams :				
Signal word	: Danger	• •	•		
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AG108	AFTER GLO™ Polyurethane (Part / White Base	A)		SHW-85-NA-GHS-US	

Section 2. Hazards identification

Hazard statements	: Highly flammable liquid and vapor.
	Harmful if inhaled.
	Causes serious eye damage. Causes skin irritation.
	Suspected of damaging the unborn child. Suspected of causing cancer.
	May cause respiratory irritation.
	May cause drowsiness or dizziness.
	Causes damage to organs through prolonged or repeated exposure. (lungs)
Precautionary statements	
-	· Obtain anagial instructions before use. Do not bandle until all sofety processions have
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.
	Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Titanium Dioxide	≥25 - ≤50	13463-67-7
Cyclohexanone	≥10 - ≤25	108-94-1
n-Butyl Acetate	≥10 - ≤25	123-86-4
Talc	≤10	14807-96-6
Methyl Ethyl Ketone	≤9	78-93-3
Toluene	≤5	108-88-3
Xylene	≤3	1330-20-7
Ethylbenzene	<1	100-41-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necess	sary first aid measures
Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms	/effects, acute and delayed	
Potential acute health eff		
Eye contact	: Causes serious eye damage.	
Inhalation	: Harmful if inhaled. Can cause central nervous system (CNS) depression. May caus drowsiness or dizziness. May cause respiratory irritation.	е
Skin contact	: Causes skin irritation.	
Ingestion	: Can cause central nervous system (CNS) depression.	
<u>Over-exposure signs/syn</u>	iptoms	
Eye contact	: Adverse symptoms may include the following: pain watering redness	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations	
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Section 4. First aid measures

Okin contect	· Adverse comparisons may include the following:
Skin contact	: Adverse symptoms may include the following:
	pain or irritation
	redness
	blistering may occur
	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
Ingestion	: Adverse symptoms may include the following:
ingeotion	stomach pains
	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
Indication of immediate med	dical attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large
	quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is
	suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protec	tive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions	for safe	handling
<u>r recautions</u>	IOI Juie	nanunig

recautions for sale nanuling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Titanium Dioxide	ACGIH TLV (United States, 3/2016). TWA: 10 mg/m ³ 8 hours. OSHA PEL (United States, 6/2016).
Cyclohexanone	TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2016). Absorbed through skin. TWA: 20 ppm 8 hours.
	STEL: 50 ppm 15 minutes. NIOSH REL (United States, 10/2016). Absorbed through skin. TWA: 25 ppm 10 hours.
	TWA: 100 mg/m ³ 10 hours. OSHA PEL (United States, 6/2016). TWA: 50 ppm 8 hours. TWA: 200 mg/m ³ 8 hours.
n-Butyl Acetate	NIOSH REL (United States, 10/2016). TWA: 150 ppm 10 hours. TWA: 710 mg/m ³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 150 ppm 8 hours. TWA: 710 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2016). STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.
Talc	NIOSH REL (United States, 10/2016). TWA: 2 mg/m ³ 10 hours. Form: Respirable fraction ACGIH TLV (United States, 3/2016). TWA: 2 mg/m ³ 8 hours. Form: Respirable fraction
Methyl Ethyl Ketone	ACGIH TLV (United States, 3/2016). TWA: 200 ppm 8 hours. TWA: 590 mg/m ³ 8 hours. STEL: 300 ppm 15 minutes. STEL: 885 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2016). TWA: 200 ppm 10 hours. TWA: 590 mg/m ³ 10 hours. STEL: 300 ppm 15 minutes. STEL: 885 mg/m ³ 15 minutes. STEL: 885 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 200 ppm 8 hours. TWA: 590 mg/m ³ 8 hours.
Toluene	OSHA PEL Z2 (United States, 2/2013). TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes. NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 375 mg/m ³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m ³ 15 minutes. ACGIH TLV (United States, 3/2016). TWA: 20 ppm 8 hours.
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Xylene	ACGIH TLV (United States, 3/2016).
	TWA: 100 ppm 8 hours.
	TWA: 434 mg/m ³ 8 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 651 mg/m ³ 15 minutes.
	OSHA PEL (United States, 6/2016).
	TWA: 100 ppm 8 hours.
	TWA: 435 mg/m ³ 8 hours.
Ethylbenzene	ACGIH TLV (United States, 3/2016).
	TWA: 20 ppm 8 hours.
	NIOSH REL (United States, 10/2016).
	TWA: 100 ppm 10 hours.
	TWA: 435 mg/m³ 10 hours.
	STEL: 125 ppm 15 minutes.
	STEL: 545 mg/m ³ 15 minutes.
	OSHA PEL (United States, 6/2016).
	TWA: 100 ppm 8 hours.
	TWA: 435 mg/m³ 8 hours.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Cyclohexanone	CA Alberta Provincial (Canada, 4/2009). Absorbed through skin. 8 hrs OEL: 20 ppm 8 hours. 8 hrs OEL: 80 mg/m ³ 8 hours. 15 min OEL: 200 mg/m ³ 15 minutes. 15 min OEL: 50 ppm 15 minutes. CA British Columbia Provincial (Canada, 7/2016). Absorbed through skin. TWA: 20 ppm 8 hours. STEL: 50 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). Absorbed through skin. TWA: 20 ppm 8 hours. STEL: 50 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). Absorbed through skin. TWAEV: 25 ppm 8 hours. TWAEV: 25 ppm 8 hours. TWAEV: 100 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin. STEL: 50 ppm 15 minutes. TWAEV: 20 ppm 8 hours. TEL: 50 ppm 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin. STEL: 50 ppm 15 minutes. TWA: 20 ppm 8 hours.
n-Butyl Acetate	 CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 200 ppm 15 minutes. 15 min OEL: 950 mg/m³ 15 minutes. 8 hrs OEL: 150 ppm 8 hours. 8 hrs OEL: 713 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). TWAEV: 150 ppm 8 hours. STEV: 200 ppm 15 minutes. STEV: 200 ppm 15 minutes. STEV: 200 ppm 15 minutes. STEV: 950 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 1/2014).
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Mothyd Ethyd Katana		7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours.
Methyl Ethyl Ketone		CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 300 ppm 15 minutes. 8 hrs OEL: 200 ppm 8 hours.
		8 hrs OEL: 590 mg/m ³ 8 hours. 15 min OEL: 885 mg/m ³ 15 minutes.
		CA British Columbia Provincial (Canada, 7/2016). TWA: 50 ppm 8 hours.
		STEL: 100 ppm 15 minutes.
		CA Ontario Provincial (Canada, 7/2015). TWA: 200 ppm 8 hours.
		STEL: 300 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014).
		TWAEV: 50 ppm 8 hours. TWAEV: 150 mg/m ³ 8 hours.
		STEV: 100 ppm 15 minutes. STEV: 300 mg/m ³ 15 minutes.
		CA Saskatchewan Provincial (Canada, 7/2013).
		STEL: 300 ppm 15 minutes. TWA: 200 ppm 8 hours.
Toluene		CA Alberta Provincial (Canada, 4/2009). Absorbed through skin.
		8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 188 mg/m ³ 8 hours.
		CA British Columbia Provincial (Canada, 7/2016).
		TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015).
		TWA: 20 ppm 8 hours. CA Québec Provincial (Canada, 1/2014).
		Absorbed through skin. TWAEV: 50 ppm 8 hours.
		TWAEV: 188 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada,
		7/2013). Absorbed through skin.
		STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.
Xylene		CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 100 ppm 8 hours.
		15 min OEL: 651 mg/m ³ 15 minutes. 15 min OEL: 150 ppm 15 minutes.
		8 hrs OEL: 434 mg/m ³ 8 hours. CA British Columbia Provincial (Canada,
		7/2016). TWA: 100 ppm 8 hours.
		STEL: 150 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014).
		TWAEV: 100 ppm 8 hours.
		TWAEV: 434 mg/m ³ 8 hours. STEV: 150 ppm 15 minutes.
		STEV: 651 mg/m ³ 15 minutes. CA Ontario Provincial (Canada, 7/2015).
		STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
		CA Saskatchewan Provincial (Canada, 7/2013).
		STEL: 150 ppm 15 minutes.
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	TWA: 100 ppm 8 hours.
Ethylbenzene	CA Alberta Provincial (Canada, 4/2009).
	8 hrs OEL: 100 ppm 8 hours.
	8 hrs OEL: 434 mg/m ³ 8 hours.
	15 min OEL: 543 mg/m ³ 15 minutes.
	15 min OEL: 125 ppm 15 minutes.
	CA British Columbia Provincial (Canada,
	7/2016).
	TWA: 20 ppm 8 hours.
	CA Ontario Provincial (Canada, 7/2015).
	TWA: 20 ppm 8 hours.
	CA Québec Provincial (Canada, 1/2014).
	TWAEV: 100 ppm 8 hours.
	TWAEV: 434 mg/m ³ 8 hours.
	STEV: 125 ppm 15 minutes.
	STEV: 543 mg/m ³ 15 minutes.
	CA Saskatchewan Provincial (Canada,
	7/2013).
	STEL: 125 ppm 15 minutes.
	TWA: 100 ppm 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits		
Cyclohexanone	NOM-010-STPS-2014 (Mexico, 4/2016).		
-	Absorbed through skin.		
	TWA: 20 ppm 8 hours.		
	STEL: 50 ppm 15 minutes.		
n-Butyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016).		
	TWA: 150 ppm 8 hours.		
	STEL: 200 ppm 15 minutes.		
Methyl Ethyl Ketone	NOM-010-STPS-2014 (Mexico, 4/2016).		
	TWA: 200 ppm 8 hours.		
	STEL: 300 ppm 15 minutes.		
Toluene	NOM-010-STPS-2014 (Mexico, 4/2016).		
	TWA: 20 ppm 8 hours.		
Xylene	NOM-010-STPS-2014 (Mexico, 4/2016).		
	STEL: 150 ppm 15 minutes.		
	TWA: 100 ppm 8 hours.		
Ethylbenzene	NOM-010-STPS-2014 (Mexico, 4/2016).		
	TWA: 20 ppm 8 hours.		

Appropriate engineering controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measur	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety

showers are close to the workstation location.

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Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Appearance		
Physical state	:	Liquid.
Color	:	Not available.
Odor	:	Not available.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	78°C (172.4°F)
Flash point	:	Closed cup: 5°C (41°F) [Pensky-Martens Closed Cup]
Evaporation rate	:	5.6 (butyl acetate = 1)
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	1	Lower: 1% Upper: 10%
Vapor pressure	:	12.1 kPa (90.6 mm Hg) [at 20°C]
Vapor density	:	2.48 [Air = 1]
Relative density	:	1.31
Solubility	:	Not available.
Partition coefficient: n- octanol/water	1	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)
Molecular weight	:	Not applicable.
Aerosol product		
Heat of combustion	:	14.193 kJ/g

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Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

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Product/ingredient name	Result	Species	Dose	Exposure
Cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
,	LD50 Oral	Rat	1800 mg/kg	-
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Methyl Ethyl Ketone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
-	LD50 Oral	Rat	3500 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
Cyclohexanone	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Human	-	48 hours 50 Percent	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Talc	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
Methyl Ethyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-

Section 11. Toxicological information

	kicological informati				
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	-
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-
Cyclohexanone	-	3	-
Talc	-	3	-
Toluene	-	3	-
Xylene	-	3	-
Ethylbenzene	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Category	Route of exposure	Target organs
Cyclohexanone		Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
n-Butyl Acetate Methyl Ethyl Ketone		Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation and Narcotic effects
ate of issue/Date of revision	: 2/23/2018	Date of previous issue : 2/4	V/2018 V	ersion : 7 12/1
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Toluene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Xylene	Category 3	Not applicable.	Respiratory tract irritation
Ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Name	Category	Route of exposure	Target organs
Cyclohexanone	Category 2	Not determined	Not determined
Talc	Category 1	Inhalation	lungs
Methyl Ethyl Ketone	Category 2	Not determined	Not determined
Toluene	Category 2	Not determined	Not determined
Xylene	Category 2	Not determined	Not determined
Ethylbenzene	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Toluene	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

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Skin contact	:	Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations		
		respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations		
Eye contact	:	Adverse symptoms may include the following: pain watering redness Adverse symptoms may include the following:		
Symptoms related to the	<u>ohy</u>	sical, chemical and toxicological characteristics		
Ingestion	1	Can cause central nervous system (CNS) depression.		
Skin contact		Causes skin irritation.		
Inhalation		Harmful if inhaled. Can cause central nervous system (CNS) depression. drowsiness or dizziness. May cause respiratory irritation.	May cause	;
Eye contact		Causes serious eye damage.	Ma	
Potential acute health effe				
routes of exposure				
Information on the likely		Not available.		

Ind	est	ion

: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate ef	ects and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health ef	<u>fects</u>
Not available.	
General	: Causes damage to organs through prolonged or repeated exposure.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: Suspected of damaging the unborn child.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates		
Route	ATE value	
Oral	2988.1 mg/kg	
Dermal	2829.9 mg/kg	
Inhalation (gases)	14790.9 ppm	

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
Cyclohexanone	Acute EC50 32.9 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute LC50 527000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic EC10 3.56 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Methyl Ethyl Ketone	Acute EC50 >500000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 5091000 µg/l Fresh water	Daphnia - Daphnia magna - Larvae	48 hours
	Acute LC50 3220000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna -	48 hours
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Section 12. Ecological information

-			
		Juvenile (Fledgling, Hatchling, Weanling)	
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Ethylbenzene	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6530 µg/l Fresh water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 2930 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 μg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily
Methyl Ethyl Ketone	-	-	Readily
Toluene	-	-	Readily
Xylene	-	-	Readily
Ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Toluene	-	90	low
Xylene	-	8.1 to 25.9	low

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3	3
Packing group	II	II	11		
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).	-	-	<u>Emergency</u> <u>schedules</u> F-E, S E
	ERG No.	ERG No.	ERG No.		
	128	128	128		
Special precaution	cons mod suita prior resp unloa subs	der container sizes. T e of transport (sea, air bly for that mode of tra- to shipment, and com- onsibility of the person ading dangerous good tances and on all action	he presence of a sl , etc.), does not ind ansport. All packagi pliance with the app offering the product s must be trained of	nipping description icate that the proc ng must be review plicable regulation of for transport. Pe n all of the risks d	luct is packaged ved for suitability s is the sole cople loading and
Transport in bulk a to Annex II of MAR the IBC Code		allable.			
		r shipping name	: Not available.		
	Ship t	уре	: Not available.		
		ion category	: Not available.		

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (lungs) - Category	Calculation method

Hi	sto	ry	
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Date of previous issue	: 2/4/2018
Version	: 7
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the

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Section 16. Other information

product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

AG109

Section 1. Identification

Product name	: AFTER GLO™ Polyurethane (Part B) Hardener
Product code	: AG109
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Not applicable.	
Manufacturer	: THE SHERWIN-WILLIAMS COMPANY 101 W. Prospect Avenue Cleveland, OH 44115
Emergency telephone number of the company	: US / Canada: (216) 566-2917 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year
Product Information Telephone Number	: US / Canada: Not Available Mexico: Not Available
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Section 2. Hazards identification

OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 1B
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 59.5% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 59.5% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 99. 3%
GHS label elements	
Hazard pictograms	

Signal word

: Danger

Section 2. Hazards identification

Section 2. Hazard	
Hazard statements	 Flammable liquid and vapor. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May damage the unborn child. Suspected of causing cancer.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion- proof electrical, ventilating, lighting and all material-handling equipment. Use only non- sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: IF exposed or concerned: Get medical attention. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains a chemical known to the State of California to cause cancer. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. VAPOR AND SPRAY MIST HARMFUL. Gives off harmful vapor of solvents and isocyanates. DO NOT USE IF YOU HAVE CHRONIC (LONG- TERM) LUNG OR BREATHING PROBLEMS, OR IF YOU HAVE EVER HAD A REACTION TO ISOCYANATES. USE ONLY WITH ADEQUATE VENTILATION. WHERE OVERSPRAY IS PRESENT, A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR (NIOSH approved) SHOULD BE WORN TO PREVENT EXPOSURE. IF UNAVAILABLE, AN APPROPRIATE PROPERLY FITTED APPROVED NIOSH VAPOR/ PARTICULATE RESPIRATOR MAY BE EFFECTIVE. Follow directions for respirator use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. If you have any breathing problems during use, LEAVE THE AREA and get fresh air. If problems remain or happen later, IMMEDIATELY call a doctor - If not available get emergency medical treatment. Have this label with you. Reacts with water in closed container to produce pressure which may cause container to burst. Please refer to the SDS for additional information. Keep out of reach of children. Do
Hazards not otherwise	not transfer contents to other containers for storage. None known.
classified	

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

Section 3. Composition/information on ingredients

	0	
Ingredient name	% by weight	CAS number
Urethane Polymer	≥50 - ≤75	53317-61-6
1-Methoxy-2-Propanol Acetate	≥25 - ≤50	108-65-6
Toluene Diisocyanate	<1	26471-62-5
2-Methoxy-1-Propanol Acetate	≤0.3	70657-70-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary firs	t aid measures
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Potential acute health	n effects
Eye contact	: Causes serious eye irritation.
Inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs	<u>/symptoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness

Section 4. First aid measures

Inhalation	: Adverse symptoms may include the following: wheezing and breathing difficulties asthma reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protec	tive equipment and emergency procedures	
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.	
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and materials for co	ntainment and cleaning up	
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.	
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.	

Section 7. Handling and storage

Hardener

Precautions for safe handling		
Protective measures	: Put on appropriate personal protective equipment (see Section history of skin sensitization problems or asthma, allergies or or respiratory disease should not be employed in any process in Avoid exposure - obtain special instructions before use. Avoid pregnancy. Do not handle until all safety precautions have be Do not get in eyes or on skin or clothing. Do not ingest. Avoid Use only with adequate ventilation. Wear appropriate respiration inadequate. Do not enter storage areas and confined spaces ventilated. Keep in the original container or an approved alter compatible material, kept tightly closed when not in use. Stor sparks, open flame or any other ignition source. Use explosing (ventilating, lighting and material handling) equipment. Use on Take precautionary measures against electrostatic discharge product residue and can be hazardous. Do not reuse contain	chronic or recurrent which this product is used. d exposure during een read and understood. d breathing vapor or mist. tor when ventilation is s unless adequately rnative made from a re and use away from heat, on-proof electrical only non-sparking tools. s. Empty containers retain
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas w handled, stored and processed. Workers should wash hands drinking and smoking. Remove contaminated clothing and prentering eating areas. See also Section 8 for additional inform measures.	s and face before eating, rotective equipment before
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a segregar Store in original container protected from direct sunlight in a carea, away from incompatible materials (see Section 10) and locked up. Eliminate all ignition sources. Separate from oxid container tightly closed and sealed until ready for use. Conta opened must be carefully resealed and kept upright to prever unlabeled containers. Use appropriate containment to avoid	dry, cool and well-ventilated food and drink. Store lizing materials. Keep iners that have been at leakage. Do not store in
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Section 7. Handling and storage

contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Urethane Polymer	None.
1-Methoxy-2-Propanol Acetate	AIHA WEEL (United States, 10/2011).
	TWA: 50 ppm 8 hours.
Toluene Diisocyanate	None.
2-Methoxy-1-Propanol Acetate	None.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Toluene Diisocyanate	CA British Columbia Provincial (Canada, 5/2015). TWA: 0.005 ppm 8 hours. C: 0.01 ppm CA Quebec Provincial (Canada, 1/2014). Skin sensitizer. TWAEV: 0.005 ppm 8 hours. TWAEV: 0.036 mg/m ³ 8 hours. STEV: 0.02 ppm 15 minutes. STEV: 0.14 mg/m ³ 15 minutes. CA Ontario Provincial (Canada, 7/2015). C: 0.02 ppm TWA: 0.005 ppm 8 hours.
2-Methoxy-1-Propanol Acetate	CA British Columbia Provincial (Canada, 6/2017). TWA: 20 ppm 8 hours. STEL: 40 ppm 15 minutes.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
None.	

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls Individual protection measure	 Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: 140°C (284°F)
Flash point	: Closed cup: 42°C (107.6°F) [Tagliabue Closed Cup]
Evaporation rate	: 0.35 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.3% Upper: 13.1%
Vapor pressure	: 0.24 kPa (1.8 mm Hg) [at 20°C]
Vapor density	: 4.6 [Air = 1]
Relative density	: 1.15
Solubility	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.205 cm ² /s (>20.5 cSt)
Molecular weight	: Not applicable.
Aerosol product	
Heat of combustion	: 12.573 kJ/g

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Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1-Methoxy-2-Propanol Acetate	LD50 Dermal	Rabbit	>5 g/kg	-
Toluene Diisocyanate	LD50 Oral LD50 Oral		8532 mg/kg 4130 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Toluene Diisocyanate	Skin - Severe irritant	Rabbit	-	500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Toluene Diisocyanate	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information				
Name	Category	Route of exposure	Target organs	
Toluene Diisocyanate	Category 3	Not applicable.	Respiratory tract irritation	
2-Methoxy-1-Propanol Acetate	Category 3	Not applicable.	Respiratory tract irritation	

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	:	Not available.
Potential acute health effe	cts	
Eye contact	1	Causes serious eye irritation.
Inhalation	1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	1	May cause an allergic skin reaction.
Ingestion	1	No known significant effects or critical hazards.

Symptoms related to the p	nysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: wheezing and breathing difficulties asthma reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate eff	fects and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health ef	fects

Not available.

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General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: May damage the unborn child.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been
	cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

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	Hardener						

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED
Transport hazard class(es)	3	3	3	3	3
Packing group	III	111	ш	ш	Ш
Environmental hazards	No.	No.	No.	No.	No.
Additional information	This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).			Emergency schedules E
	ERG No.	ERG No.	ERG No.		
	128	128	128		
Special precautior Fransport in bulk a o Annex II of MAR	consid mode suitabl prior to respor unload substa	nodal shipping descr ler container sizes. T of transport (sea, air ly for that mode of tra o shipment, and com nsibility of the person ling dangerous good ances and on all action ilable.	he presence of a sh , etc.), does not indi ansport. All packagir pliance with the app offering the produc s must be trained or	hipping description for cate that the production ng must be reviewed licable regulations is t for transport. Peop n all of the risks derive	or a particular t is packaged for suitability the sole le loading and
he IBC Code	Proper	shipping name	: Not available.		
	Ship ty		: Not available.		
	only ty				

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Section 15. Regulatory information

SARA 313

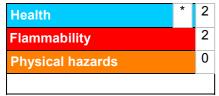
SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

	Justification			
FLAMMABLE LIQUIDS - C SERIOUS EYE DAMAGE/ RESPIRATORY SENSITIZ SKIN SENSITIZATION - C CARCINOGENICITY - Cat TOXIC TO REPRODUCTI	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method			
<u>History</u>				
Date of printing	:	4/11/2018		
Date of issue/Date of revision	:	4/11/2018		
Date of previous issue	Date of previous issue : 9/8/2017			
Version	:	8		
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification ar IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coeffic MARPOL = International Convention for the Prevention as modified by the Protocol of 1978. ("Marpol" = marine	cient of Pollution From Ships, 1973	

UN = United Nations

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to

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Section 16. Other information

determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

AG110

Section 1. Identification

Product name	: AFTER GLO™ Photoluminescent Paint (Part A) Green
Product code	: AG110
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Not applicable.	
Manufacturer	: THE SHERWIN-WILLIAMS COMPANY 101 W. Prospect Avenue Cleveland, OH 44115
Emergency telephone number of the company	: US / Canada: (216) 566-2917 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year
Product Information Telephone Number	: US / Canada: Not Available Mexico: Not Available
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 68.2% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 77.9% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 72%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Causes serious eye irritation. May damage the unborn child. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

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Section 2. Hazards identification

Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Do not breathe vapor. Wash hands thoroughly after handling.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.
	Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not availa

: Not available.

CAS number/other identifiers

identification

Ingredient name	% by weight	CAS number
Toluene	≤8.2	108-88-3
1-Methoxy-2-Propanol Acetate	≤3	108-65-6
Methyl Isobutyl Ketone	≤2.7	108-10-1
n-Butyl Acetate	≤1.7	123-86-4
Light Aromatic Hydrocarbons	≤0.3	64742-95-6
1-Methyl-2-Pyrrolidone	≤0.3	872-50-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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Section 4. First aid measures

Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

otential acute health	<u>effects</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/	<u>symptoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

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Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.		
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".		
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).		
Methods and materials for co	ntainment and cleaning up		
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.		
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.		

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Section 7. Handling and storage

Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Toluene	OSHA PEL Z2 (United States, 2/2013). TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes. NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 375 mg/m ³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m ³ 15 minutes. ACGIH TLV (United States, 3/2017). TWA: 20 ppm 8 hours.
1-Methoxy-2-Propanol Acetate	AIHA WEEL (United States, 10/2011). TWA: 50 ppm 8 hours.
Methyl Isobutyl Ketone	ACGIH TLV (United States, 3/2017). TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes. NIOSH REL (United States, 10/2016). TWA: 50 ppm 10 hours. TWA: 205 mg/m ³ 10 hours. STEL: 75 ppm 15 minutes. STEL: 300 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 100 ppm 8 hours. TWA: 410 mg/m ³ 8 hours.
n-Butyl Acetate	NIOSH REL (United States, 10/2016). TWA: 150 ppm 10 hours. TWA: 710 mg/m ³ 10 hours.
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	STEL: 200 ppm 15 minutes. STEL: 950 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 150 ppm 8 hours. TWA: 710 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2017). STEL: 150 ppm 15 minutes.
Light Aromatic Hydrocarbons 1-Methyl-2-Pyrrolidone	TWA: 50 ppm 8 hours. None. AIHA WEEL (United States, 10/2011). Absorbed through skin. TWA: 10 ppm 8 hours.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Toluene	 CA Alberta Provincial (Canada, 4/2009). Absorbed through skin. 8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 188 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 6/2017). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 20 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). Absorbed through skin. TWAEV: 50 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin. STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.
Methyl Isobutyl Ketone	 CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 205 mg/m³ 8 hours. 8 hrs OEL: 50 ppm 8 hours. 15 min OEL: 75 ppm 15 minutes. 15 min OEL: 307 mg/m³ 15 minutes. CA British Columbia Provincial (Canada, 6/2017). TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 50 ppm 8 hours. TWAEV: 205 mg/m³ 8 hours. STEV: 75 ppm 15 minutes.
	STEV: 307 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 75 ppm 15 minutes. TWA: 50 ppm 8 hours.
n-Butyl Acetate	CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 200 ppm 15 minutes. 15 min OEL: 950 mg/m ³ 15 minutes. 8 hrs OEL: 150 ppm 8 hours. 8 hrs OEL: 713 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 6/2017).
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	TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014).
	TWAEV: 150 ppm 8 hours. TWAEV: 713 mg/m ³ 8 hours. STEV: 200 ppm 15 minutes. STEV: 950 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours.
1-Methyl-2-Pyrrolidone	CA Ontario Provincial (Canada, 7/2015). TWA: 400 mg/m ³ 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits		
Toluene	NOM-010-STPS-2014 (Mexico, 4/2016).		
	TWA: 20 ppm 8 hours.		
Methyl Isobutyl Ketone	NOM-010-STPS-2014 (Mexico, 4/2016).		
	TWA: 50 ppm 8 hours.		
	STEL: 75 ppm 15 minutes.		
n-Butyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016).		
	TWA: 150 ppm 8 hours.		
	STEL: 200 ppm 15 minutes.		

Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measu	<u>ires</u>	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

•	· ·
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance		
Physical state	:	Liquid.
Color	:	Not available.
Odor	:	Not available.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	105°C (221°F)
Flash point	:	Closed cup: 28°C (82.4°F) [Pensky-Martens Closed Cup]
Evaporation rate	1	2 (butyl acetate = 1)
Flammability (solid, gas)	1	Not available.
Lower and upper explosive (flammable) limits	:	Lower: 1% Upper: 13.1%
Vapor pressure	:	2.9 kPa (22 mm Hg) [at 20°C]
Vapor density	:	3.1 [Air = 1]
Relative density	1	1.95
Solubility	1	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)
Molecular weight	:	Not applicable.
Aerosol product		
Heat of combustion	:	8.044 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

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Section 10. Stability and reactivity

Incom	patible	mater	ials
meoni	patible	mater	ais

Acute toxicity

- : Reactive or incompatible with the following materials: oxidizing materials
- : Under normal conditions of storage and use, hazardous decomposition products should Hazardous decomposition not be produced. products

Section 11. Toxicological information

Information on toxicological effects

Product/ingredient name	Result	Species	Dose	Exposure
Toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
1-Methoxy-2-Propanol	LD50 Dermal	Rabbit	>5 g/kg	-
Acetate				
	LD50 Oral	Rat	8532 mg/kg	-
Methyl Isobutyl Ketone	LD50 Oral	Rat	2080 mg/kg	-
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
2	LD50 Oral	Rat	10768 mg/kg	-
Light Aromatic Hydrocarbons	LD50 Oral	Rat	8400 mg/kg	-
1-Methyl-2-Pyrrolidone	LD50 Dermal	Rabbit	8 g/kg	-
	LD50 Oral	Rat	3914 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100	-
				milligrams	
	Eyes - Mild irritant	Rabbit	-	870	-
				Micrograms	
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
				milligrams	
	Skin - Mild irritant	Pig	-	24 hours 250	-
				microliters	
	Skin - Mild irritant	Rabbit	-	435	-
				milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
	Olice Madanata invitant	Dabbit		milligrams	
	Skin - Moderate irritant	Rabbit	-	500 milligrama	-
Mathud Japhutud Katana	Even Mederate irritant	Dabbit		milligrams 24 hours 100	
Methyl Isobutyl Ketone	Eyes - Moderate irritant	Rabbit	-	microliters	-
	Eyes - Severe irritant	Rabbit	-	40 milligrams	
	Skin - Mild irritant	Rabbit		24 hours 500	-
		Rabbit		milligrams	
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	_	100	-
Datyr / tootato				milligrams	
	Skin - Moderate irritant	Rabbit	_	24 hours 500	-
				milligrams	
Light Aromatic Hydrocarbons	Eyes - Mild irritant	Rabbit	-	24 hours 100	-
c ,	-			microliters	
1-Methyl-2-Pyrrolidone	Eyes - Moderate irritant	Rabbit	-	100	-
	-			milligrams	

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Section 11. Toxicological information

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Toluene Methyl Isobutyl Ketone	-	3 2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Methyl Isobutyl Ketone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
n-Butyl Acetate	Category 3	Not applicable.	Narcotic effects
Light Aromatic Hydrocarbons	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
1-Methyl-2-Pyrrolidone	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
Toluene	Category 2	Not determined	Not determined
Methyl Isobutyl Ketone		Not determined	Not determined
Light Aromatic Hydrocarbons		Not determined	Not determined

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely : Not available. routes of exposure

Potential acute health effects

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Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the p	hysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness

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Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Delayed and immediate ef	fects and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health e	ffects
Not available.	
General	: May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: May damage the unborn child.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Numerical management of the	

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2476.8 mg/kg
Inhalation (vapors)	140.9 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 μg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Methyl Isobutyl Ketone	Acute LC50 505000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 78 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas - Embryo	33 days
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Section 12. Ecological information

n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
1-Methyl-2-Pyrrolidone	Acute LC50 1.23 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 832 ppm Fresh water	Fish - Lepomis macrochirus	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Toluene Methyl Isobutyl Ketone	-	-	Readily Readily
n-Butyl Acetate	-	-	Readily
Light Aromatic Hydrocarbons	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Toluene	-	90	low
Light Aromatic Hydrocarbons		10 to 2500	high

Mobility in soil

Soil/water partition : Not available. coefficient (K_{oc})

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3	3
Packing group	111	111	111		
Date of issue/Date of re			issue : 1/16/201		ersion :7 12/
AG110 AFT Gree	ER GLO™ Photoluminescer en	nt Paint (Part A)		S	HW-85-NA-GHS-US

Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).	3	-	<u>Emergency</u> <u>schedules</u> F-E, S E
	ERG No.	ERG No.	ERG No.		
	128	128	128		
Special precautio					tional purposes and do not
		mode of transport (sea, a suitably for that mode of t prior to shipment, and cor responsibility of the perso unloading dangerous goo substances and on all act	ir, etc.), does not i ransport. All packa npliance with the a n offering the proo ds must be trained	ndicate that the aging must be r applicable regu luct for transpo d on all of the ri	eviewed for suitability lations is the sole rt. People loading and sks deriving from the
to Annex II of MAF	according : N	mode of transport (sea, a suitably for that mode of t prior to shipment, and cor responsibility of the perso unloading dangerous goo	ir, etc.), does not i ransport. All packa npliance with the a n offering the proo ds must be trained	ndicate that the aging must be r applicable regu luct for transpo d on all of the ri	e product is packaged eviewed for suitability lations is the sole rt. People loading and sks deriving from the
Transport in bulk to Annex II of MAF the IBC Code	according : N RPOL and P	mode of transport (sea, a suitably for that mode of t prior to shipment, and cor responsibility of the perso unloading dangerous goo substances and on all act	ir, etc.), does not i ransport. All packa npliance with the a n offering the proo ds must be trained	ndicate that the aging must be r applicable regu luct for transpo d on all of the ri- ergency situati	e product is packaged eviewed for suitability lations is the sole rt. People loading and sks deriving from the

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

: 1/16/2018

Section 16. Other information

Classification

FLAMMABLE LIQUIDS - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

<u>History</u>	
Date of printing	: 4/18/2018
Date of issue/Date of revision	: 4/18/2018
Date of previous issue	: 1/16/2018
Version	: 7
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

Justification

On basis of test data Calculation method Calculation method Calculation method Calculation method

SAFETY DATA SHEET

AG111

Section 1. Identification

Product name	: AFTER GLO™ Photoluminescent Paint (Part B) Hardener
Product code	: AG111
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Not applicable.	
Manufacturer	: THE SHERWIN-WILLIAMS COMPANY 101 W. Prospect Avenue Cleveland, OH 44115
Emergency telephone number of the company	: US / Canada: (216) 566-2917 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year
Product Information Telephone Number	: US / Canada: Not Available Mexico: Not Available
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communicatio (29 CFR 1910.1200).	n Standard
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respirato irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic Category 3 	
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxic Percentage of the mixture consisting of ingredient(s) of unknown dermal to Percentage of the mixture consisting of ingredient(s) of unknown inhalation 6%	xicity: 63.3%
GHS label elements		
Hazard pictograms		
Signal word	: Warning	
Date of issue/Date of revision	: 9/9/2017 Date of previous issue : 4/18/2017 Version : 4	1/13

Section 2. Hazards identification

Hazard statements	 Flammable liquid and vapor. Harmful if inhaled. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness.
Precautionary statements	
Prevention	: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	 DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. VAPOR AND SPRAY MIST HARMFUL. Gives off harmful vapor of solvents and isocyanates. DO NOT USE IF YOU HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS, OR IF YOU HAVE EVER HAD A REACTION TO ISOCYANATES. USE ONLY WITH ADEQUATE VENTILATION. WHERE OVERSPRAY IS PRESENT, A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR (NIOSH approved) SHOULD BE WORN TO PREVENT EXPOSURE. IF UNAVAILABLE, AN APPROPRIATE PROPERLY FITTED APPROVED NIOSH VAPOR/PARTICULATE RESPIRATOR MAY BE EFFECTIVE. Follow directions for respirator use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. If you have any breathing problems during use, LEAVE THE AREA and get fresh air. If problems remain or happen later, IMMEDIATELY call a doctor - If not available get emergency medical treatment. Have this label with you. Reacts with water in closed container to produce pressure which may cause container to burst.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

Date of	^r issue/Date	of revision
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: 9/9/2017

Date of previous issue

Section 3. Composition/information on ingredients

Ingredient name	% by weight	CAS number
Hexamethylene Diisocyanate Polymer	63.29	28182-81-2
n-Butyl Acetate	36.62	123-86-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necess	sary first aid measures
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important sympt Potential acute healt	toms/effects, acute and delayed h effects
Eye contact	Causes serious eye irritation.
Inhalation	 Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: Can cause central nervous system (CNS) depression.
Over-exposure signs	s/symptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness

Date of issue/Date of revision	: 9/9/2017	Date of previous issue	: 4/18/2017	Version : 4

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Section 4. First aid measures

Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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Section 6. Accidental release measures

Personal precautions, protec	tive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	history of s this produc breathing respirator spaces un alternative and use an explosion- only non-s	propriate personal protect skin sensitization problem of is used. Do not get in vapor or mist. Use only when when ventilation is inade less adequately ventilate made from a compatible way from heat, sparks, of proof electrical (ventilatin parking tools. Take precent tainers retain product res	ns should not be em eyes or on skin or clowith adequate ventila quate. Do not enter d. Keep in the origin e material, kept tightl pen flame or any oth ng, lighting and mate cautionary measures	ployed in any pro othing. Do not in ation. Wear appr storage areas a nal container or a y closed when n er ignition sourc rial handling) eq against electros	ocess ngest. ropria nd cor an app ot in u e. Us uipme static o	in which Avoid te nfined proved use. Store se ent. Use discharges.
Advice on general occupational hygiene	:	handled, s drinking ar	nking and smoking shoul tored and processed. W nd smoking. Remove co ating areas. See also Se	orkers should wash ntaminated clothing	hands and face and protective e	befor quipm	e eating, ient before
Conditions for safe storage, including any incompatibilities	:	Store in or area, away locked up. container to opened m	cordance with local regu iginal container protected from incompatible mate Eliminate all ignition so ightly closed and sealed ust be carefully resealed containers. Use appropr	d from direct sunlight rials (see Section 10 urces. Separate fror until ready for use. and kept upright to p	t in a dry, cool ar)) and food and (n oxidizing mate Containers that l prevent leakage.	hd we drink. rials. have l Do r	ll-ventilated Store Keep been
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Section 7. Handling and storage

contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Hexamethylene Diisocyanate Polymer n-Butyl Acetate	None. NIOSH REL (United States, 10/2016). TWA: 150 ppm 10 hours. TWA: 710 mg/m ³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 150 ppm 8 hours. TWA: 710 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2016). STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
n-Butyl Acetate	 CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 200 ppm 15 minutes. 15 min OEL: 950 mg/m³ 15 minutes. 8 hrs OEL: 150 ppm 8 hours. 8 hrs OEL: 713 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). TWAEV: 150 ppm 8 hours. STEV: 200 ppm 15 minutes. STEV: 200 ppm 15 minutes. STEV: 200 ppm 15 minutes. STEV: 950 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
n-Butyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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Environmental exposure : controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures :	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection :	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection :	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection :	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	: Liquid.	
Color	: Not available.	
Odor	: Not available.	
Odor threshold	: Not available.	
рН	: Not available.	
Melting point	: Not available.	
Boiling point	: 123°C (253.4°F)	
Flash point	: Closed cup: 27°C (80.6°F) [Pensky-Martens Closed Cup]	
Evaporation rate	: 1 (butyl acetate = 1)	
Flammability (solid, gas)	: Not available.	
Lower and upper explosive (flammable) limits	: Lower: 1.38% Upper: 7.6%	
Vapor pressure	: 1.3 kPa (10 mm Hg) [at 20°C]	
Vapor density	: 4 [Air = 1]	
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Section 9. Physical and chemical properties

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Relative density	: 1.04
Solubility	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.205 cm ² /s (>20.5 cSt)
Molecular weight	: Not applicable.
Aerosol product	
Heat of combustion	: 10.147 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hexamethylene Diisocyanate Polymer	LC50 Inhalation Vapor	Rat	18500 mg/m³	1 hours
n-Butyl Acetate	LD50 Dermal LD50 Oral	Rabbit Rat	>17600 mg/kg 10768 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hexamethylene Diisocyanate Polymer	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitization

Not available.

Section 11. Toxicological information

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Hexamethylene Diisocyanate Polymer	Category 3		Respiratory tract irritation
n-Butyl Acetate	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely	: Not available.
routes of exposure	

Toules of exposure	
Potential acute health effects	

Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the pl	<u>ıy</u>	sical, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	:	Adverse symptoms may include the following: irritation redness
Ingestion	÷	No specific data.

<u>Delayed and immediate effects and also chronic effects from short and long term exposure</u> <u>Short term exposure</u>

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Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health e	fects
Not available.	
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates	
Route	ATE value
Inhalation (vapors)	11.02 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	···· · · · · · · · · · · · · · · · · ·	Crustaceans - Artemia salina Fish - Pimephales promelas	48 hours 96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Hexamethylene Diisocyanate Polymer	-	367.7	low

<u>Mobility in soil</u> Soil/water partition coefficient (K _{oc})	: Not available.
Other adverse effects	: No known significant effects or critical hazards.

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Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
Transport hazard class(es)	3	3	3	3	3
Packing group	III	Ш	Ш	ш	ш
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).	-	-	Emergency schedules F-E, S- E
	ERG No.	ERG No.	ERG No.		
	128	128	128		
Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.					

Transport in bulk according	1	Not available.
to Annex II of MARPOL and		
the IDC Code		

the IBC Code

 Proper shipping name
 : Not available.

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Section 14. Transport information

Ship type

: Not available.

Pollution category

: Not available.

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

Not applicable.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Flocedule used to delive		
	Classification	
FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3		
History		
Date of printing	: 9/9/2017	
Date of issue/Date of revision	: 9/9/2017	
Date of previous issue	: 4/18/2017	
Version	: 4	
Key to abbreviations	previations: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations	
Notice to reader		

Section 16. Other information

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

AG112

Section 1. Identification

Product name	: AFTER GLO™ Gun Flushing Solvent
Product code	: AG112
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Not applicable.	
Manufacturer	: THE SHERWIN-WILLIAMS COMPANY 101 W. Prospect Avenue Cleveland, OH 44115
Emergency telephone number of the company	: US / Canada: (216) 566-2917 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year
Product Information Telephone Number	: US / Canada: Not Available Mexico: Not Available
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Section 2. Hazards identification

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
 FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 55.5% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 80. 5%
: Danger

Section 2. Hazards identification

Hazard statements	 Highly flammable liquid and vapor. Causes serious eye irritation. Causes skin irritation. Suspected of damaging the unborn child. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	 DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

Ingredient name	% by weight	CAS number
n-Butyl Acetate	44.53	123-86-4
Isopropyl Acetate	35.94	108-21-4
Toluene	19.53	108-88-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures		
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. 	
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.	
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.	
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.	

Most important symptoms/effects, acute and delayed

Potential acute health	effects
Eye contact	: Causes serious eye irritation.
Inhalation	 Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Causes skin irritation.
Ingestion	 Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
Over-exposure signs/	symptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations

Section 4. First aid measures

Ingestion	: Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate med	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fig	hting measures
Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	ive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions :

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Section 6. Accidental release measures

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

<u>Control parameters</u> <u>Occupational exposure limits (OSHA United States)</u>

• •	_
Ingredient name	Exposure limits
n-Butyl Acetate	NIOSH REL (United States, 10/2016). TWA: 150 ppm 10 hours. TWA: 710 mg/m ³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 150 ppm 8 hours. TWA: 710 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2016). STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.
Isopropyl Acetate	TWA: 50 ppm 8 hours. ACGIH TLV (United States, 3/2016). TWA: 100 ppm 8 hours. STEL: 200 ppm 15 minutes. OSHA PEL (United States, 6/2016). TWA: 250 ppm 8 hours. TWA: 950 mg/m ³ 8 hours.
Toluene	OSHA PEL Z2 (United States, 2/2013). TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes. NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 375 mg/m ³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m ³ 15 minutes. ACGIH TLV (United States, 3/2016). TWA: 20 ppm 8 hours.

Occupational exposure limits (Canada)

Ingredient name Exposure limits		Exposure limits	
n-Butyl Acetate			 CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 200 ppm 15 minutes. 15 min OEL: 950 mg/m³ 15 minutes. 8 hrs OEL: 150 ppm 8 hours. 8 hrs OEL: 713 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). TWAEV: 150 ppm 8 hours. STEV: 200 ppm 15 minutes. STEV: 200 ppm 15 minutes. STEV: 200 ppm 15 minutes. STEV: 950 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours.
Isopropyl Acetate			CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 200 ppm 15 minutes. 8 hrs OEL: 416 mg/m ³ 8 hours. 15 min OEL: 832 mg/m ³ 15 minutes. 8 hrs OEL: 100 ppm 8 hours.
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toluene	CA British Columbia Provincial (Canada, 7/2016). TWA: 100 ppm 8 hours. STEL: 200 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 100 ppm 8 hours. STEL: 200 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). TWAEV: 250 ppm 8 hours. TWAEV: 1040 mg/m³ 8 hours. STEV: 310 ppm 15 minutes. STEV: 11200 mg/m³ 15 minutes. STEV: 1290 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 200 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Alberta Provincial (Canada, 4/2009). Absorbed through skin. 8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 188 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 20 ppm 8 hours.
toluene	CA Alberta Provincial (Canada, 4/2009). Absorbed through skin. 8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 188 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015).
	CA Québec Provincial (Canada, 1/2014). Absorbed through skin. TWAEV: 50 ppm 8 hours. TWAEV: 188 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin. STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
n-Butyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.
Isopropyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 100 ppm 8 hours.
toluene	STEL: 200 ppm 15 minutes. NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 20 ppm 8 hours.

Appropriate engineering controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.				
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.				

Individual protection measures

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Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

: 9/9/2017

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<u>Appearance</u>		
Physical state	Liquid.	
Color	Not available.	
Odor	Not available.	
Odor threshold	Not available.	
рН	Not available.	
Melting point	Not available.	
Boiling point	85°C (185°F)	
Flash point	Closed cup: 2°C (35.6°F) [Pensky-Martens Closed Cup]	
Evaporation rate	3 (butyl acetate = 1)	
Flammability (solid, gas)	Not available.	
Lower and upper explosive (flammable) limits	Lower: 1% Upper: 7.6%	
Vapor pressure	6.3 kPa (47.5 mm Hg) [at 20°C]	
Vapor density	3.1 [Air = 1]	
Relative density	0.87	
Solubility	Not available.	
Partition coefficient: n- octanol/water	Not available.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	

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Section 9. Physic	al and chemical properties
Viscosity	: Kinematic (40°C (104°F)): <0.205 cm²/s (<20.5 cSt)
Molecular weight	: Not applicable.
Aerosol product	
Heat of combustion	: 27.002 kJ/g
Section 10. Stabi	lity and reactivity
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Isopropyl Acetate	LD50 Oral	Rat	6750 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m ³	4 hours
	LD50 Oral	Rat	636 mg/kg	-

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Isopropyl Acetate	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	-
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-

Section 11. Toxicol	ogical information	on			
	Skin - Moderate irritant	Rabbit	-	milligrams 500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Toluene	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
n-Butyl Acetate Isopropyl Acetate Toluene	Category 3 Category 3 Category 3		Narcotic effects Narcotic effects Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
Toluene	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Toluene	ASPIRATION HAZARD - Category 1

Information on the likely : Not available. routes of exposure

<u>s</u>
Causes serious eye irritation.
Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Causes skin irritation.
Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

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Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
Delayed and immediate effe	ects and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects

Not available.

General	: May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: Suspected of damaging the unborn child.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates	
Route	ATE value
Oral	3256.2 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Isopropyl Acetate	Acute LC50 110 mg/l Marine water	Crustaceans - Artemia salina	48 hours
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 μg/l Fresh water Chronic NOEC 1000 μg/l Fresh water	Fish - Oncorhynchus kisutch - Fry Daphnia - Daphnia magna	96 hours 21 days

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate Toluene	-	-	Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Toluene	-	90	low

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact
	with soil, waterways, drains and sewers.

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Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
Transport hazard class(es)	3	3	3	3	3
Packing group	II	11	П	11	II
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).	-		Emergency schedules F-E, S E
	ERG No.	ERG No.	ERG No.		
	128	128	128		
Special precaution	consid mode suitab prior t respo unload substa	modal shipping descr der container sizes. T of transport (sea, air ly for that mode of tra o shipment, and com nsibility of the person ding dangerous good ances and on all actio	he presence of a sh , etc.), does not indi ansport. All packagin pliance with the app offering the product is must be trained on	nipping description for cate that the producing must be reviewed blicable regulations is t for transport. Peop n all of the risks derive	or a particular t is packaged I for suitability s the sole le loading and
Transport in bulk a to Annex II of MAR the IBC Code	-	ailable.			
		shipping name	: Not available.		
	Ship ty	vpe	: Not available.		
		on category	: Not available.		

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

Date of previous issue : 4/1

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

History

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Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to

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Section 16. Other information

determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

AG113

Section 1. Identification			
Product name	: AFTER GLO™ Clearcoat (Part A)		
Product code	: AG113		
Other means of identification	: Not available.		
Product type	: Liquid.		
Relevant identified uses of t	the substance or mixture and uses advised against		
Not applicable.			
Manufacturer	: THE SHERWIN-WILLIAMS COMPANY 101 W. Prospect Avenue Cleveland, OH 44115		
Emergency telephone number of the company	: US / Canada: (216) 566-2917 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year		
Product Information Telephone Number	: US / Canada: Not Available Mexico: Not Available		
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available		
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year		

Section 2. Hazards identification

OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 33.5% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 48. 4%
GHS label elements	
Hazard pictograms	
Signal word	: Danger

Section 2. Hazards identification

Section 2. mazard	
Hazard statements	 Highly flammable liquid and vapor. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. Suspected of causing cancer. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.
	Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Acetone	≥10 - ≤25	67-64-1
n-Butyl Acetate	≥10 - ≤25	123-86-4
n-Butyl Propionate	≤10	590-01-2
1,2,4-Trimethylbenzene	≤5	95-63-6
Light Aromatic Hydrocarbons	≤3	64742-95-6
Ethyl 3-Ethoxypropionate	≤3	763-69-9
1,3,5-Trimethylbenzene	≤3	108-67-8
Bis(pentamethyl-4-piperidyl)sebacate	≤1	41556-26-7
Cumene	<1	98-82-8
Pentamethyliperidyl Sebacate	≤0.3	82919-37-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

	<u>s/effects, acute and delayed</u>		
Potential acute health ef			
Eye contact Inhalation	 Causes serious eye irritation. Can cause central nervous system (CNS) depression. May cause d dizziness. May cause respiratory irritation. 	rowsiness or	
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.		
Ingestion	: Can cause central nervous system (CNS) depression.		
Over-exposure signs/sy	<u>mptoms</u>		
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness		
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness		
Skin contact	: Adverse symptoms may include the following: irritation redness		
Ingestion	: No specific data.		
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Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 	
Specific treatments	: No specific treatment.	
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.	

See toxicological information (Section 11)

Section 5. Fire-fighting measures **Extinguishing media** Suitable extinguishing : Use dry chemical, CO₂, water spray (fog) or foam. media Unsuitable extinguishing : Do not use water jet. media Specific hazards arising : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. from the chemical In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Hazardous thermal : Decomposition products may include the following materials: carbon dioxide decomposition products carbon monoxide **Special protective actions** : Promptly isolate the scene by removing all persons from the vicinity of the incident if for fire-fighters there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. : Fire-fighters should wear appropriate protective equipment and self-contained breathing **Special protective** equipment for fire-fighters apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	hi th oi ai ni oi tig ai m m	ut on appropriate personal protective equipment (see Section 8). Persons with a istory of skin sensitization problems should not be employed in any process in which his product is used. Avoid exposure - obtain special instructions before use. Do not andle until all safety precautions have been read and understood. Do not get in eyes r on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with dequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do ot enter storage areas and confined spaces unless adequately ventilated. Keep in the riginal container or an approved alternative made from a compatible material, kept ghtly closed when not in use. Store and use away from heat, sparks, open flame or ny other ignition source. Use explosion-proof electrical (ventilating, lighting and haterial handling) equipment. Use only non-sparking tools. Take precautionary neasures against electrostatic discharges. Empty containers retain product residue nd can be hazardous. Do not reuse container.
Advice on general occupational hygiene	ha di ei	ating, drinking and smoking should be prohibited in areas where this material is andled, stored and processed. Workers should wash hands and face before eating, rinking and smoking. Remove contaminated clothing and protective equipment before ntering eating areas. See also Section 8 for additional information on hygiene leasures.
Conditions for safe storage, including any incompatibilities	S ai lo co oj ui	tore in accordance with local regulations. Store in a segregated and approved area. tore in original container protected from direct sunlight in a dry, cool and well-ventilated rea, away from incompatible materials (see Section 10) and food and drink. Store ocked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep ontainer tightly closed and sealed until ready for use. Containers that have been pened must be carefully resealed and kept upright to prevent leakage. Do not store in nlabeled containers. Use appropriate containment to avoid environmental pontamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Acetone	ACGIH TLV (United States, 3/2016). TWA: 250 ppm 8 hours. STEL: 500 ppm 15 minutes. NIOSH REL (United States, 10/2016).
	TWA: 250 ppm 10 hours. TWA: 590 mg/m ³ 10 hours. OSHA PEL (United States, 6/2016). TWA: 1000 ppm 8 hours. TWA: 2400 mg/m ³ 8 hours.
n-Butyl Acetate	NIOSH REL (United States, 10/2016). TWA: 150 ppm 10 hours.
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	TWA: 710 mg/m ³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 150 ppm 8 hours. TWA: 710 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2016). STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.
n-Butyl Propionate 1,2,4-Trimethylbenzene	None. ACGIH TLV (United States, 3/2016). TWA: 25 ppm 8 hours. TWA: 123 mg/m ³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 25 ppm 10 hours. TWA: 125 mg/m ³ 10 hours.
Light Aromatic Hydrocarbons Ethyl 3-Ethoxypropionate 1,3,5-Trimethylbenzene	None. None. ACGIH TLV (United States, 3/2016). TWA: 25 ppm 8 hours. TWA: 123 mg/m ³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 25 ppm 10 hours. TWA: 125 mg/m ³ 10 hours.
Bis(pentamethyl-4-piperidyl)sebacate Cumene	None. ACGIH TLV (United States, 3/2016). TWA: 50 ppm 8 hours. NIOSH REL (United States, 10/2016). Absorbed through skin. TWA: 50 ppm 10 hours. TWA: 245 mg/m ³ 10 hours. OSHA PEL (United States, 6/2016). Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 245 mg/m ³ 8 hours.
Pentamethyliperidyl Sebacate	None.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Acetone	 CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 1200 mg/m³ 8 hours. 15 min OEL: 1800 mg/m³ 15 minutes. 8 hrs OEL: 500 ppm 8 hours. 15 min OEL: 750 ppm 15 minutes. CA British Columbia Provincial (Canada, 7/2016). TWA: 250 ppm 8 hours. STEL: 500 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 500 ppm 8 hours. STEL: 750 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). TWAEV: 500 ppm 8 hours. STEV: 1190 mg/m³ 8 hours. STEV: 1000 ppm 15 minutes. STEV: 1000 ppm 15 minutes. STEV: 2380 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 750 ppm 15 minutes. TWA: 500 ppm 8 hours.
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· · · · ·	
n-Butyl Acetate	CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 200 ppm 15 minutes. 15 min OEL: 950 mg/m ³ 15 minutes. 8 hrs OEL: 150 ppm 8 hours. 8 hrs OEL: 713 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). TWAEV: 150 ppm 8 hours. TWAEV: 713 mg/m ³ 8 hours. STEV: 200 ppm 15 minutes. STEV: 200 ppm 15 minutes. STEV: 950 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours.
1,2,4-Trimethylbenzene	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 123 mg/m ³ 8 hours. 8 hrs OEL: 25 ppm 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 25 ppm 8 hours. CA Québec Provincial (Canada, 1/2014). TWAEV: 25 ppm 8 hours. TWAEV: 123 mg/m ³ 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 25 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 30 ppm 15 minutes. TWA: 25 ppm 8 hours.
1,3,5-Trimethylbenzene	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 123 mg/m ³ 8 hours. 8 hrs OEL: 25 ppm 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 25 ppm 8 hours. CA Québec Provincial (Canada, 1/2014). TWAEV: 25 ppm 8 hours. TWAEV: 123 mg/m ³ 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 25 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 30 ppm 15 minutes. TWA: 25 ppm 8 hours.

Occupational exposure limits (Mexico)

Ingredient name			Exposure limits		
Acetone			TWA: 500 ppm		
n-Butyl Acetate		STEL: 750 ppm 15 minutes. NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 150 ppm 8 hours.			
1,2,4-Trimethylbenzene			STEL: 200 ppr NOM-010-STPS	n 15 minutes. 5-2014 (Mexico, 4/2016).	
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1,3,5-Trimethylbe	izene	TWA: 25 ppm 8 hours. NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 25 ppm 8 hours.
		I WA: 25 ppm 8 hours.

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measu	<u>res</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: 55°C (131°F)
Flash point	: Closed cup: -12°C (10.4°F) [Pensky-Martens Closed Cup]

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Section 9. Physical and chemical properties

Evaporation rate	:	5.6 (butyl acetate = 1)
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	:	Lower: 0.7% Upper: 12.8%
Vapor pressure	:	24 kPa (180 mm Hg) [at 20°C]
Vapor density	:	2 [Air = 1]
Relative density	:	0.94
Solubility	:	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)
Molecular weight	:	Not applicable.
Aerosol product		
Heat of combustion	:	19.295 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute	tox	citv
7 10 410		

Product/ingredient name	Result	Species	Dose	Exposure	
Acetone	LD50 Oral	Rat	5800 mg/kg	-	
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-	
-	LD50 Oral	Rat	10768 mg/kg	-	
n-Butyl Propionate	LD50 Dermal	Rabbit	>14 g/kg	-	
	LD50 Oral	Rat	11031 mg/kg	-	
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours	
	LD50 Oral	Rat	5 g/kg	-	
Light Aromatic Hydrocarbons	LD50 Oral	Rat	8400 mg/kg	-	
Ethyl 3-Ethoxypropionate	LD50 Oral	Rat	3200 mg/kg	-	
1,3,5-Trimethylbenzene	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours	
-	LD50 Oral	Rat	5000 mg/kg	-	
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours	
	LD50 Oral	Rat	1400 mg/kg	-	

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Irritation/Corrosion

Section 11. Toxicological information

Eyes - Mild irritant Eyes - Mild irritant Eyes - Moderate irritant Eyes - Severe irritant Skin - Mild irritant Skin - Mild irritant	Human Rabbit Rabbit Rabbit Rabbit Rabbit	- - - -	186300 parts per million 10 microliters 24 hours 20 milligrams 20 milligrams 24 hours 500	- - -
Eyes - Moderate irritant Eyes - Severe irritant Skin - Mild irritant	Rabbit Rabbit Rabbit		10 microliters 24 hours 20 milligrams 20 milligrams 24 hours 500	- -
Eyes - Moderate irritant Eyes - Severe irritant Skin - Mild irritant	Rabbit Rabbit Rabbit		24 hours 20 milligrams 20 milligrams 24 hours 500	- -
Eyes - Severe irritant Skin - Mild irritant	Rabbit Rabbit	-	milligrams 20 milligrams 24 hours 500	-
Skin - Mild irritant	Rabbit	-	20 milligrams 24 hours 500	-
Skin - Mild irritant	Rabbit	-	24 hours 500	-
		-		
Skin - Mild irritant	Rabbit		Imilliaromo	-
Skin - Milu Imtant	Radon		milligrams 395	
		-		-
Eves Mederate irritant	Dabbit			
Eyes - Moderate Initalit	Rabbit	-		-
Skin - Moderate irritant	Rabbit			
	T CODDIC			_
Eves - Moderate irritant	Rabbit	_		_
-		_		_
Skin - Mild irritant	Guinea pig	-		-
Skin - Mild irritant	Rabbit	-	0.5 Mililiters	-
Skin - Moderate irritant	Rabbit	-	24 hours 500	-
			milligrams	
Eyes - Mild irritant	Rabbit	-	24 hours 100	-
			microliters	
Skin - Mild irritant	Rabbit	-	24 hours 500	-
			milligrams	
Eyes - Mild irritant	Rabbit	-		-
Skin - Moderate irritant	Rabbit	-		-
Eyes - Mild irritant	Rabbit	-		-
	5			
		-		-
Skin - Mild irritant	Rabbit	-		-
Chin Madarata imitant	Debbit			
Skin - Moderate Irritant	Raddit	-		-
	Skin - Mild irritant Skin - Moderate irritant Eyes - Mild irritant	Skin - Moderate irritantRabbitEyes - Moderate irritantRabbitEyes - Severe irritantRabbitSkin - Mild irritantGuinea pigSkin - Mild irritantRabbitSkin - Moderate irritantRabbitSkin - Moderate irritantRabbitSkin - Mild irritantRabbitEyes - Mild irritantRabbitSkin - Moderate irritantRabbitEyes - Mild irritantRabbitEyes - Mild irritantRabbitEyes - Mild irritantRabbitEyes - Mild irritantRabbit	Skin - Moderate irritantRabbit-Eyes - Moderate irritantRabbit-Eyes - Severe irritantRabbit-Skin - Mild irritantGuinea pig Rabbit-Skin - Mild irritantGuinea pig Rabbit-Skin - Moderate irritantRabbit-Eyes - Mild irritantRabbit-Skin - Mild irritantRabbit-Skin - Mild irritantRabbit-Skin - Mild irritantRabbit-Skin - Mild irritantRabbit-Eyes - Mild irritantRabbit-Skin - Moderate irritantRabbit-Eyes - Mild irritantRabbit-Skin - Mild irritantRabbit-Skin - Mild irritantRabbit-	Skin - Moderate irritantRabbit-milligrams 24 hours 500 milligramsEyes - Moderate irritantRabbit-0.1 MillilitersEyes - Severe irritantRabbit-100 milligramsSkin - Mild irritantGuinea pig Rabbit-0.3 MillilitersSkin - Mild irritantRabbit-0.5 MillilitersSkin - Mild irritantRabbit-24 hours 500 milligramsSkin - Moderate irritantRabbit-24 hours 500 milligramsEyes - Mild irritantRabbit-24 hours 500 milligramsSkin - Mild irritantRabbit-24 hours 500 milligramsEyes - Mild irritantRabbit-24 hours 500 milligramsSkin - Moderate irritantRabbit-24 hours 500 milligramsEyes - Mild irritantRabbit-24 hours 500 milligramsEyes - Mild irritantRabbit-24 hours 20 milligramsEyes - Mild irritantRabbit-24 hours 500 milligramsEyes - Mild irritantRabbit-24 hours 20 milligramsEyes - Mild irritantRabbit-24 hours 500 milligramsEyes - Mild irritantRabbit-24 hours 500 milligramsEyes - Mild irritantRabbit-24 hours 100 milligramsEyes - Mild irritantRabbit-24 hours 10 milligramsEyes - Mild irritantRabbit-24 hours 10 milligrams

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Cumene	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

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Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Acetone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
n-Butyl Acetate	Category 3	Not applicable.	Narcotic effects
1,2,4-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Light Aromatic Hydrocarbons	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
1,3,5-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Cumene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
Acetone	Category 2	Not determined	Not determined
Light Aromatic Hydrocarbons	Category 2	Not determined	Not determined
Cumene	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Light Aromatic Hydrocarbons	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
Cumene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	: Not available.	
Potential acute health effe	<u>cts</u>	
Eye contact	: Causes serious eye irritation.	
Inhalation	: Can cause central nervous system (CNS) depression. May cause dro dizziness. May cause respiratory irritation.	owsiness or
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.	
Ingestion	: Can cause central nervous system (CNS) depression.	
<u>Symptoms related to the p</u> Eye contact	 <u>hysical, chemical and toxicological characteristics</u> Adverse symptoms may include the following: 	
Eye contact	pain or irritation watering redness	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness	
Skin contact	: Adverse symptoms may include the following: irritation redness	
Ingestion	: No specific data.	
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Delayed and immediate effects and also chronic effects from short and long term exposure			
<u>Short term exposure</u>			
Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Long term exposure			
Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Potential chronic health ef	ifects		
Not available.			
General	 May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. 		
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.		
Mutagenicity	: No known significant effects or critical hazards.		
Teratogenicity	: No known significant effects or critical hazards.		
Developmental effects	: No known significant effects or critical hazards.		
Fertility effects	: No known significant effects or critical hazards.		

Numerical measures of toxicity

Acute	toxicity	<u>estimates</u>	
-			

Route	ATE value
Oral	61984.3 mg/kg
Inhalation (vapors)	213.9 mg/l

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
Acetone	Acute EC50 7200000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 6900 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Fundulus heteroclitus	4 weeks
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
1,2,4-Trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pectenicrus - Adult	48 hours
	Acute LC50 7720 µg/l Fresh water	Fish - Pimephales promelas	96 hours
1,3,5-Trimethylbenzene	Acute LC50 13000 µg/l Marine water	Crustaceans - Cancer magister - Zoea	48 hours
	Acute LC50 12520 µg/l Fresh water	Fish - Carassius auratus	96 hours
	Chronic NOEC 400 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Cumene	Acute EC50 2600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 7400 µg/l Fresh water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 10600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
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Section 12. Ecological information

Acute LC50 2700 µg/l Fresh water

Fish - Oncorhynchus mykiss

96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Acetone	-		Readily
n-Butyl Acetate	-		Readily
Light Aromatic Hydrocarbons	-		Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
1,2,4-Trimethylbenzene Light Aromatic Hydrocarbons 1,3,5-Trimethylbenzene	-	243 10 to 2500 161	low high low
Cumene	-	35.48	low

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3	3
Packing group	II	П	II	11	11
Environmental hazards	No.	No.	No.	No.	No.
Date of issue/Date of rev	/ision : 2/2/201	Pate of provious	issue : 9/17/201	 7/(or	sion :9 13/15
	ER GLO™ Clearcoat (Part A	· · · · · · · · · · · · · · · · · · ·	1550e : 9/11/201		W-85-NA-GHS-US

Section 14.	Transpo	rt information			
Additional information	-	Product classifi as per the following sectio of the Transportation Dangerous Goo Regulations: 2. 18-2.19 (Class	ns of ods	-	<u>Emergency</u> <u>schedules</u> F-E, S- E
	ERG No.	ERG No.	ERG No.		
	128	128	128		
		consider container size mode of transport (sea suitably for that mode of prior to shipment, and of responsibility of the per unloading dangerous g substances and on all a	, air, etc.), does not i of transport. All pack compliance with the son offering the proc oods must be trained	ndicate that the pr aging must be revi applicable regulati duct for transport. d on all of the risks	oduct is packaged ewed for suitability ons is the sole People loading and deriving from the
Transport in bulk to Annex II of MA the IBC Code		Not available.			
		Proper shipping name	: Not availab	le.	
		Ship type	: Not availab	le.	

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Section 16. Other information

: 9/17/2017

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

UN = United Nations

IBC = Intermediate Bulk Container

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

: 9

	Classification	Justification	
FLAMMABLE LIQUIDS - C	Category 2	On basis of test data	
SKIN CORROSION/IRRIT	ATION - Category 2	Calculation method	
SERIOUS EYE DAMAGE/	EYE IRRITATION - Category 2A	Calculation method	
SKIN SENSITIZATION - C	Category 1	Calculation method	
CARCINOGENICITY - Cat	tegory 2	Calculation method	
SPECIFIC TARGET ORG	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract		
	AN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method	
SPECIFIC TARGET ORG	AN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method	
<u>History</u>			
Date of printing	: 2/2/2018		
Date of issue/Date of revision	: 2/2/2018		

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

Notice	to	rea	der

Date of previous issue

Key to abbreviations

Version

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

AG114

Section 1. Identification

Product name	: AFTER GLO™ Clearcoat (Part C) Reducer
Product code	: AG114
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Not applicable.	
Manufacturer	: THE SHERWIN-WILLIAMS COMPANY 101 W. Prospect Avenue Cleveland, OH 44115
Emergency telephone number of the company	: US / Canada: (216) 566-2917 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year
Product Information Telephone Number	: US / Canada: Not Available Mexico: Not Available
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 26.1% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 88. 9%
GHS label elements	
Hazard pictograms	
Date of issue/Date of revision	: 9/17/2017 Date of previous issue : 9/5/2017 Version : 5.01 1/16

Section 2. Hazards identification

Signal word	: Danger
Hazard statements	 Highly flammable liquid and vapor. Harmful if swallowed or if inhaled. Causes serious eye irritation. Causes skin irritation. Suspected of causing cancer. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

Ingredient name	% by weight	CAS number
n-Butyl Acetate	35	123-86-4
Methyl Ethyl Ketone	20	78-93-3
Methyl n-Propyl Ketone	18.9	107-87-9
Ethyl 3-Ethoxypropionate	15	763-69-9
Methyl n-Amyl Ketone	10	110-43-0
Methyl Isobutyl Ketone	1.1	108-10-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary fire	t aid measures
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effe	ects	
Eye contact	:	Causes serious eye irritation.
Inhalation	:	Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	:	Causes skin irritation.
Ingestion	:	Harmful if swallowed. Can cause central nervous system (CNS) depression.
Over-exposure signs/sym	ptom	<u>ns</u>
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	:	Adverse symptoms may include the following: irritation redness
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Section 4. First aid measures

Ingestion

: No specific data.

Indication of immediate med	lical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5 Fire fighting massures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

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Section 6. Accidental release measures

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	predient name Exposure limits				
n-Butyl Acetate			TWA: 150 ppr TWA: 710 mg STEL: 200 pp STEL: 950 mg OSHA PEL (U TWA: 150 ppr TWA: 710 mg ACGIH TLV (U	//m ³ 10 hours. m 15 minutes. g/m ³ 15 minutes. nited States, 6/2016). m 8 hours. g/m ³ 8 hours. Inited States, 3/2016). m 15 minutes.	
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Methyl Ethyl Ketone	ACGIH TLV (United States, 3/2016). TWA: 200 ppm 8 hours.
	TWA: 590 mg/m ³ 8 hours.
	STEL: 300 ppm 15 minutes. STEL: 885 mg/m ³ 15 minutes.
	NIOSH REL (United States, 10/2016).
	TWA: 200 ppm 10 hours.
	TWA: 590 mg/m ³ 10 hours. STEL: 300 ppm 15 minutes.
	STEL: 885 mg/m ³ 15 minutes.
	OSHA PEL (United States, 6/2016).
	TWA: 200 ppm 8 hours.
	TWA: 590 mg/m ³ 8 hours.
Methyl n-Propyl Ketone	NIOSH REL (United States, 10/2016). TWA: 150 ppm 10 hours.
	TWA: 130 ppm to hours. TWA: 530 mg/m ³ 10 hours.
	OSHA PEL (United States, 6/2016).
	TWA: 200 ppm 8 hours.
	TWA: 700 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2016).
	STEL: 150 ppm 15 minutes.
Ethyl 3-Ethoxypropionate	None.
Methyl n-Amyl Ketone	ACGIH TLV (United States, 3/2016).
	TWA: 50 ppm 8 hours. TWA: 233 mg/m³ 8 hours.
	NIOSH REL (United States, 10/2016).
	TWA: 100 ppm 10 hours.
	TWA: 465 mg/m³ 10 hours. OSHA PEL (United States, 6/2016).
	TWA: 100 ppm 8 hours.
	TWA: 465 mg/m ³ 8 hours.
Methyl Isobutyl Ketone	ACGIH TLV (United States, 3/2016).
	TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes.
	NIOSH REL (United States, 10/2016).
	TWA: 50 ppm 10 hours.
	TWA: 205 mg/m ³ 10 hours. STEL: 75 ppm 15 minutes.
	STEL: 75 ppm 15 minutes. STEL: 300 mg/m ³ 15 minutes.
	OSHA PEL (United States, 6/2016).
	TWA: 100 ppm 8 hours.
	TWA: 410 mg/m³ 8 hours.

Occupational exposure limits (Canada)

Ingredient name		Exposure limi	its			
n-Butyl Acetate			15 min OEL: 9 8 hrs OEL: 15 8 hrs OEL: 71 CA British Col 7/2016). TWA: 20 ppm CA Ontario Pr TWA: 150 pp	200 ppm 15 mir 950 mg/m ³ 15 n 50 ppm 8 hours. 13 mg/m ³ 8 hour Iumbia Provinc n 8 hours. rovincial (Cana	nutes. ninutes. rs. cial (Canada	
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			CA Québec Provincial (Canada, 1/2014). TWAEV: 150 ppm 8 hours. TWAEV: 713 mg/m ³ 8 hours. STEV: 200 ppm 15 minutes. STEV: 950 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours.
Methyl Ethyl Ketone			 CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 300 ppm 15 minutes. 8 hrs OEL: 200 ppm 8 hours. 8 hrs OEL: 590 mg/m³ 8 hours. 15 min OEL: 885 mg/m³ 15 minutes. CA British Columbia Provincial (Canada, 7/2016). TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 200 ppm 8 hours. STEL: 300 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). TWAEV: 50 ppm 8 hours. STEV: 100 ppm 15 minutes. STEV: 100 ppm 15 minutes. STEV: 100 ppm 15 minutes. STEV: 300 mg/m³ 15 minutes.
Methyl n-Propyl Ketone			TWA: 200 ppm 8 hours. CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 200 ppm 8 hours. 15 min OEL: 250 ppm 15 minutes. 8 hrs OEL: 705 mg/m ³ 8 hours. 15 min OEL: 881 mg/m ³ 15 minutes. CA British Columbia Provincial (Canada, 7/2016). TWA: 150 ppm 8 hours. STEL: 250 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). STEL: 150 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). TWAEV: 150 ppm 8 hours. TWAEV: 150 ppm 8 hours. TWAEV: 530 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 250 ppm 15 minutes.
Methyl n-Amyl Ketone			TWA: 200 ppm 8 hours. CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 233 mg/m ³ 8 hours. 8 hrs OEL: 50 ppm 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 50 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 25 ppm 8 hours. TWA: 115 mg/m ³ 8 hours. CA Québec Provincial (Canada, 1/2014). TWAEV: 50 ppm 8 hours.
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	TWAEV: 233 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.
Methyl Isobutyl Ketone	 CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 205 mg/m³ 8 hours. 8 hrs OEL: 50 ppm 8 hours. 15 min OEL: 75 ppm 15 minutes. 15 min OEL: 307 mg/m³ 15 minutes. CA British Columbia Provincial (Canada, 7/2016). TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Québec Provincial (Canada, 1/2014). TWAEV: 50 ppm 8 hours. STEV: 75 ppm 15 minutes. STEV: 75 ppm 15 minutes. STEV: 307 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 75 ppm 15 minutes. TWA: 50 ppm 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
n-Butyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 150 ppm 8 hours.
	STEL: 200 ppm 15 minutes.
Methyl Ethyl Ketone	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 200 ppm 8 hours.
	STEL: 300 ppm 15 minutes.
Methyl n-Propyl Ketone	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 100 ppm 8 hours.
	STEL: 700 ppm 15 minutes.
Methyl n-Amyl Ketone	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 50 ppm 8 hours.
Methyl Isobutyl Ketone	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 50 ppm 8 hours.
	STEL: 75 ppm 15 minutes.

Appropriate engineering controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.				
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.				

Individual protection measures

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Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: 78°C (172.4°F)
Flash point	: Closed cup: 9°C (48.2°F) [Pensky-Martens Closed Cup]
Evaporation rate	: 5.6 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.05% Upper: 12.1%
Vapor pressure	: 12.1 kPa (90.6 mm Hg) [at 20°C]
Vapor density	: 2.48 [Air = 1]
Relative density	: 0.85
Solubility	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.

Section 9. Physic	al and chemical properties
Viscosity	: Kinematic (40°C (104°F)): >0.205 cm ² /s (>20.5 cSt)
Molecular weight	: Not applicable.
<u>Aerosol product</u>	
Heat of combustion	: 30.446 kJ/g
Section 10. Stabi	lity and reactivity
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products shoul not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
, ,	LD50 Oral	Rat	10768 mg/kg	-
Methyl Ethyl Ketone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
Methyl n-Propyl Ketone	LD50 Dermal	Rabbit	6500 mg/kg	-
	LD50 Oral	Rat	1600 mg/kg	-
Ethyl 3-Ethoxypropionate	LD50 Oral	Rat	3200 mg/kg	-
Methyl n-Amyl Ketone	LD50 Oral	Rat	1600 mg/kg	-
Methyl Isobutyl Ketone	LD50 Oral	Rat	2080 mg/kg	-

Irritation/Corrosion

Result	Species	Score	Exposure	Observation
Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
Skin - Moderate irritant	Rabbit	-	24 hours 500	-
Skin - Mild irritant	Rabbit	-	24 hours 14	-
Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Skin - Mild irritant	Rabbit	-	405 milligrams	-
Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
Eyes - Moderate irritant	Rabbit	-		-
	Eyes - Moderate irritant Skin - Moderate irritant Skin - Mild irritant Skin - Moderate irritant Skin - Mild irritant Skin - Mild irritant Skin - Mild irritant	Eyes - Moderate irritantRabbitSkin - Moderate irritantRabbitSkin - Mild irritantRabbitSkin - Moderate irritantRabbitSkin - Mild irritantRabbit	Eyes - Moderate irritantRabbit-Skin - Moderate irritantRabbit-Skin - Mild irritantRabbit-Skin - Moderate irritantRabbit-Skin - Moderate irritantRabbit-Skin - Mild irritantRabbit-	Eyes - Moderate irritantRabbit-100 milligramsSkin - Moderate irritantRabbit-24 hours 500 milligramsSkin - Mild irritantRabbit-24 hours 14 milligramsSkin - Moderate irritantRabbit-24 hours 14 milligramsSkin - Moderate irritantRabbit-24 hours 500 milligramsSkin - Mild irritantRabbit-405 milligramsSkin - Mild irritantRabbit-405 milligramsSkin - Mild irritantRabbit-24 hours 500 milligramsSkin - Mild irritantRabbit-24 hours 14 milligramsSkin - Mild irritantRabbit-24 hours 14 milligrams

Section 11. Toxicological information

Eyes - Severe irritant Skin - Mild irritant	Rabbit Rabbit		microliters 40 milligrams 24 hours 500 - milligrams	
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Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Methyl Isobutyl Ketone	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
n-Butyl Acetate Methyl Ethyl Ketone	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation and Narcotic effects
Methyl n-Propyl Ketone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Methyl n-Amyl Ketone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Methyl Isobutyl Ketone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	•••	Route of exposure	Target organs
Methyl Ethyl Ketone Methyl n-Propyl Ketone Methyl n-Amyl Ketone Methyl Isobutyl Ketone	Category 2 Category 2	Not determined Not determined	Not determined Not determined Not determined Not determined

Aspiration hazard

Not available.

Information on the likely routes of exposure	: Not available.
Potential acute health effe	icts
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes skin irritation.
Ingestion	: Harmful if swallowed. Can cause central nervous system (CNS) depression.
Symptoms related to the p	physical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Delayed and immediate ef	fects and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health ef	ffects
Not available.	
General	: May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
.	
Numerical measures of to	<u>xicity</u>
Acute toxicity estimates	

12/16

Route	ATE value
Oral	481.3 mg/kg
Inhalation (vapors)	11 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Methyl Ethyl Ketone	Acute EC50 >500000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 5091000 µg/l Fresh water	Daphnia - Daphnia magna -	48 hours
		Larvae	
	Acute LC50 3220000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Methyl n-Propyl Ketone	Acute LC50 1240000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Methyl n-Amyl Ketone	Acute LC50 131000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Methyl Isobutyl Ketone	Acute LC50 505000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
, , , , , , , , , , , , , , , , , , ,	Chronic NOEC 78 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas -	33 days
		Embryo	, in the second se

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily
Methyl Ethyl Ketone	-	-	Readily
Methyl n-Amyl Ketone	-	-	Readily
Methyl Isobutyl Ketone	-	-	Readily

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
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Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG	
UN number	UN1263	UN1263	UN1263	UN1263	UN1263	
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED	
Transport hazard class(es)	3	3	3	3	3	
Packing group	11	П	11	11	11	
Environmental hazards	No.	No.	No.	No.	No.	
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).	-		Emergency schedules E	
	ERG No.	ERG No.	ERG No.			
	128	128	128			
Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.						
Transport in bulk a to Annex II of MAR the IBC Code		ailable.				
		shipping name	: Not available.			
Ship type : Not available.						
		on category	: Not available.			

Section 15. Regulatory information

<u>SARA 313</u>

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method

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Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject

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Section 16. Other information

to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

AG115

Section 1. Identification

Product name	: AFTER GLO™ Clearcoat (Part B) Hardener
Product code	: AG115
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Not applicable.	
Manufacturer	: THE SHERWIN-WILLIAMS COMPANY 101 W. Prospect Avenue Cleveland, OH 44115
Emergency telephone number of the company	: US / Canada: (216) 566-2917 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year
Product Information Telephone Number	: US / Canada: Not Available Mexico: Not Available
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 81% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 88% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 44%
GHS label elements	
Hazard pictograms	
Signal word	: Danger

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	Hardener					

Section 2. Hazards identification

Hazard statements Precautionary statements	 Highly flammable liquid and vapor. Harmful if inhaled. Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Suspected of causing cancer. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion- proof electrical, ventilating, lighting and all material-handling equipment. Use only non- sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	 DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains a chemical known to the State of California to cause cancer. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. VAPOR AND SPRAY MIST HARMFUL. Gives off harmful vapor of solvents and isocyanates. DO NOT USE IF YOU HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS, OR IF YOU HAVE EVER HAD A REACTION TO ISOCYANATES. USE ONLY WITH ADEQUATE VENTILATION. WHERE OVERSPRAY IS PRESENT, A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR (NIOSH approved) SHOULD BE WORN TO PREVENT EXPOSURE. IF UNAVAILABLE, AN APPROPRIATE PROPERLY FITTED APPROVED NIOSH VAPOR/PARTICULATE RESPIRATOR MAY BE EFFECTIVE. Follow directions for respirator use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. If you have any breathing problems during use, LEAVE THE AREA and get fresh air. If problems remain or happen later, IMMEDIATELY call a doctor - If not available get emergency medical treatment. Have this label with you. Reacts with water in closed container to produce pressure which may cause container to burst.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

: Mixture

: Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Hexamethylene Diisocyanate Polymer	≥50 - ≤61	28182-81-2
Isophorone Diisocyanate Polymer	≥25 - ≤50	53880-05-0
n-Butyl Acetate	≤12	123-86-4
Light Aromatic Hydrocarbons	≤7.6	64742-95-6
Cumene	≤0.3	98-82-8
Isophorone Diisocyanate (max.)	≤0.3	4098-71-9
Hexamethylene Diisocyanate (max.)	≤0.3	822-06-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary firs	aid measures
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptom	oms/effects, acute and delayed
Potential acute health	<u>i effects</u>
Eye contact	: Causes serious eye irritation.
Inhalation	 Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

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Section 4. First aid measures

Over-exposure signs/sym	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing wheezing and breathing difficulties asthma
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

•	-
Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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Section 6. Accidental release measures

Personal precautions, protec	tive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	entainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Hardener

Precautions for safe handling		
Protective measures	: Put on appropriate personal protective equipment (see Sect history of skin sensitization problems or asthma, allergies or respiratory disease should not be employed in any process Avoid exposure - obtain special instructions before use. Do precautions have been read and understood. Do not get in Do not breathe vapor or mist. Do not ingest. Use only with appropriate respirator when ventilation is inadequate. Do not confined spaces unless adequately ventilated. Keep in the approved alternative made from a compatible material, kept use. Store and use away from heat, sparks, open flame or Use explosion-proof electrical (ventilating, lighting and mate Use only non-sparking tools. Take precautionary measures discharges. Empty containers retain product residue and ca reuse container.	r chronic or recurrent in which this product is used. o not handle until all safety eyes or on skin or clothing. adequate ventilation. Wear ot enter storage areas and original container or an t tightly closed when not in any other ignition source. erial handling) equipment. against electrostatic
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas handled, stored and processed. Workers should wash hand drinking and smoking. Remove contaminated clothing and entering eating areas. See also Section 8 for additional informeasures.	ds and face before eating, protective equipment before
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a segre Store in original container protected from direct sunlight in a area, away from incompatible materials (see Section 10) an locked up. Eliminate all ignition sources. Separate from ox container tightly closed and sealed until ready for use. Cont opened must be carefully resealed and kept upright to preve unlabeled containers. Use appropriate containment to avoid	a dry, cool and well-ventilated id food and drink. Store idizing materials. Keep tainers that have been ent leakage. Do not store in
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Section 7. Handling and storage

contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Hexamethylene Diisocyanate Polymer Isophorone Diisocyanate Polymer n-Butyl Acetate	None. None. NIOSH REL (United States, 10/2016). TWA: 150 ppm 10 hours. TWA: 710 mg/m ³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 150 ppm 8 hours. TWA: 710 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2016). STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.
Light Aromatic Hydrocarbons Cumene	None. ACGIH TLV (United States, 3/2016). TWA: 50 ppm 8 hours. NIOSH REL (United States, 10/2016). Absorbed through skin. TWA: 50 ppm 10 hours. TWA: 245 mg/m ³ 10 hours. OSHA PEL (United States, 6/2016). Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 245 mg/m ³ 8 hours.
Isophorone Diisocyanate (max.)	ACGIH TLV (United States, 3/2016). TWA: 0.005 ppm 8 hours. NIOSH REL (United States, 10/2016). Absorbed through skin. TWA: 0.005 ppm 10 hours. TWA: 0.045 mg/m ³ 10 hours. STEL: 0.02 ppm 15 minutes. STEL: 0.18 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). Absorbed through skin. TWA: 5 mg/m ³ , (as CN) 8 hours.
Hexamethylene Diisocyanate (max.)	ACGIH TLV (United States, 3/2016). TWA: 0.005 ppm 8 hours. TWA: 0.03 mg/m ³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 0.005 ppm 10 hours. TWA: 0.035 mg/m ³ 10 hours. CEIL: 0.02 ppm 10 minutes. CEIL: 0.14 mg/m ³ 10 minutes. OSHA PEL (United States, 6/2016). Absorbed through skin. TWA: 5 mg/m ³ , (as CN) 8 hours.

Occupational exposure limits (Canada)

Section 8. Exposure controls/personal protection **Ingredient name Exposure limits** n-Butyl Acetate CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 200 ppm 15 minutes. 15 min OEL: 950 mg/m³ 15 minutes. 8 hrs OEL: 150 ppm 8 hours. 8 hrs OEL: 713 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 7/2016). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 150 ppm 8 hours. TWAEV: 713 mg/m³ 8 hours. STEV: 200 ppm 15 minutes. STEV: 950 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours. Isophorone Diisocyanate (max.) CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 0.05 mg/m³ 8 hours. 8 hrs OEL: 0.005 ppm 8 hours. CA British Columbia Provincial (Canada, 7/2016). Skin sensitizer. TWA: 0.005 ppm 8 hours. C: 0.01 ppm CA Quebec Provincial (Canada, 1/2014). Skin sensitizer. TWAEV: 0.005 ppm 8 hours. TWAEV: 0.045 mg/m³ 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 0.005 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.015 ppm 15 minutes. TWA: 0.005 ppm 8 hours. CA Alberta Provincial (Canada, 4/2009). Hexamethylene Diisocyanate (max.) 8 hrs OEL: 0.005 ppm 8 hours. 8 hrs OEL: 0.03 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 7/2016). Skin sensitizer. TWA: 0.005 ppm 8 hours. C: 0.01 ppm CA Quebec Provincial (Canada, 1/2014). Skin sensitizer. TWAEV: 0.005 ppm 8 hours. TWAEV: 0.034 mg/m³ 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 0.03 mg/m³ 8 hours. TWA: 0.01 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.015 ppm 15 minutes. TWA: 0.005 ppm 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
n-Butyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection meas	ures
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	: Liquid.	
Color	: Not available.	
Odor	: Not available.	
Odor threshold	: Not available.	
рН	: Not available.	
Melting point	: Not available.	
Boiling point	: 123°C (253.4°F)	

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Section 9. Physical and chemical properties

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Flash point	: Closed cup: -2°C (28.4°F) [Pensky-Martens Closed Cup	<u>ا</u> ر
Evaporation rate	: 1 (butyl acetate = 1)	
Flammability (solid, gas)	: Not available.	
Lower and upper explosive (flammable) limits	: Lower: 0.7% Upper: 7.6%	
Vapor pressure	: 1.3 kPa (10 mm Hg) [at 20°C]	
Vapor density	: 4 [Air = 1]	
Relative density	: 1.09	
Solubility	: Not available.	
Partition coefficient: n- octanol/water	: Not available.	
Auto-ignition temperature	: Not available.	
Decomposition temperature	: Not available.	
Viscosity	: Kinematic (40°C (104°F)): >0.205 cm ² /s (>20.5 cSt)	
Molecular weight	: Not applicable.	
Aerosol product		
Heat of combustion	: 6.424 kJ/g	
1		

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute	tox	city

Product/ingredient name	Result	Species	Dose	Exposure
Hexamethylene Diisocyanate	LC50 Inhalation Vapor	Rat	18500 mg/m ³	1 hours
Polymer				
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Light Aromatic Hydrocarbons	LD50 Oral	Rat	8400 mg/kg	-
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Oral	Rat	1400 mg/kg	-
Isophorone Diisocyanate	LC50 Inhalation Vapor	Rat	123 mg/m ³	4 hours
(max.)			U U	
	LD50 Oral	Rat	4825 mg/kg	-
Hexamethylene Diisocyanate (max.)	LC50 Inhalation Dusts and mists	Rat	124 mg/m³	4 hours

Irritation/Corrosion

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Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hexamethylene Diisocyanate Polymer	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Light Aromatic Hydrocarbons	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-
Cumene	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	86 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Cumene	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Hexamethylene Diisocyanate Polymer	Category 3	Not applicable.	Respiratory tract irritation
Isophorone Diisocyanate Polymer	Category 3	Not applicable.	Respiratory tract irritation
n-Butyl Acetate	Category 3	Not applicable.	Narcotic effects
Light Aromatic Hydrocarbons	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Cumene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Isophorone Diisocyanate (max.)	Category 3	Not applicable.	Respiratory tract irritation
Hexamethylene Diisocyanate (max.)	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Name	 Route of exposure	Target organs
• •		Not determined Not determined

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	:	Not available.
Potential acute health effe	<u>cts</u>	
Eye contact	1	Causes serious eye irritation.
Inhalation	:	Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	1	Causes skin irritation. May cause an allergic skin reaction.
Ingestion	1	No known significant effects or critical hazards.
Symptoms related to the p	hy	sical, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing wheezing and breathing difficulties asthma
Skin contact	:	Adverse symptoms may include the following: irritation redness
Ingestion	:	No specific data.
	ec	ts and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	-	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Potential chronic health ef	fec	<u>xts</u>
Not available.		
General	:	May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	No known significant effects or critical hazards.
Torotogonicity		No known oignificant offacto ar critical bazarda

Teratogenicity : No known significant effects or critical hazards.

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: No known significant effects or critical hazards.

: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates				
Route	ATE value			
Inhalation (vapors)	11.11 mg/l			

Exposure

48 hours 96 hours

72 hours

48 hours

48 hours

96 hours

Section 12. Ecological information

Toxicity Product/ingredient name Result **Species** Crustaceans - Artemia salina n-Butyl Acetate Acute LC50 32 mg/l Marine water Acute LC50 18000 µg/l Fresh water Fish - Pimephales promelas Cumene Acute EC50 2600 µg/l Fresh water Algae - Pseudokirchneriella subcapitata Acute EC50 7400 µg/l Fresh water Crustaceans - Artemia sp. -Nauplii Acute EC50 10600 µg/l Fresh water Daphnia - Daphnia magna -Neonate Acute LC50 2700 µg/l Fresh water Fish - Oncorhynchus mykiss

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate Light Aromatic Hydrocarbons	-	-	Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Hexamethylene Diisocyanate Polymer	-	367.7	low
Light Aromatic Hydrocarbons Cumene Hexamethylene Diisocyanate	-	10 to 2500 35.48 57.63	high Iow Iow
(max.)			

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere

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Section 13. Disposal considerations

inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG		
UN number	UN1263	UN1263	UN1263	UN1263	UN1263		
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL		
Transport hazard class(es)	3	3	3	3	3		
Packing group	II	П	11	11	11		
Environmental hazards	No.	No.	No.	No.	No.		
Additional information	- ERG No.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3). ERG No.	- ERG No.		Emergency schedules F-E, S E		
			128				
Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations. Transport in bulk according to Annex II of MARPOL and : Not available.							
	POL and						

	Ship type Pollution category		Not available.
	Pollution	category	 Not available.

Section 15. Regulatory information

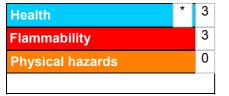
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SARA 313
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SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
RESPIRATORY SENSITIZATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method

History	
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Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

History

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the

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Section 16. Other information

product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.