## SAFETY DATA SHEET

CM0724114

### Section 1. Identification

Product name : Epoxy Primer Adduct (MIL-P-23377F)

Catalyst

Product code : CM0724114

Other means of : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

identification

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 1

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION (Fertility) - Category 1B

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

ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 17% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 29.8% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 45.

7%

**GHS label elements** 

Hazard pictograms









 Date of issue/Date of revision
 : 5/24/2019
 Date of previous issue
 : 1/23/2019
 Version
 : 9
 1/17

 CM0724114
 Epoxy Primer Adduct (MIL-P-23377F)
 SHW-85-NA-GHS-US

### Section 2. Hazards identification

### Signal word

### **Hazard statements**

: Danger

: Highly flammable liquid and vapor.

Harmful if inhaled.

Causes serious eve damage.

Causes skin irritation.

May cause an allergic skin reaction.

May damage fertility.

Suspected of causing cancer.

May be fatal if swallowed and enters airways.

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 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. 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. Immediately call a POISON CENTER or physician.

### **Storage Disposal**

: Store locked up. Store in a well-ventilated place. Keep cool.

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 Other means of

identification

: Mixture

: Not available.

**CAS** number/other identifiers

Date of issue/Date of revision 2/17 : 5/24/2019 Date of previous issue : 1/23/2019 Version: 9 CM0724114 SHW-85-NA-GHS-US Epoxy Primer Adduct (MIL-P-23377F)

### Section 3. Composition/information on ingredients

Ingredient name	% by weight	CAS number
Xylene, mixed isomers	≥25 - ≤38	1330-20-7
Isobutyl Acetate	≥25 - ≤50	110-19-0
Polyamidoamine	≥10 - ≤25	68082-29-1
Methyl Isobutyl Ketone	≥10 - ≤20	108-10-1
Ethylbenzene	≤9.4	100-41-4
Triethylene Tetramine	<1	112-24-3
4,4'-Isopropylidenediphenol	<1	80-05-7

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** 

: 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. 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

: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. 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. 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 effects

**Eye contact** : Causes serious eye damage.

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. May be fatal if swallowed and

enters airways.

#### Over-exposure signs/symptoms

 Date of issue/Date of revision
 : 5/24/2019
 Date of previous issue
 : 1/23/2019
 Version
 : 9
 3/17

 CM0724114
 Epoxy Primer Adduct (MIL-P-23377F)
 SHW-85-NA-GHS-US

### Section 4. First aid measures

**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/fatique dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

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:

> stomach pains nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations

### Indication of immediate medical 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, CO2, 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

Date of issue/Date of revision 4/17 : 5/24/2019 Date of previous issue : 1/23/2019 Version: 9 CM0724114

Epoxy Primer Adduct (MIL-P-23377F)

Catalyst

### Section 5. Fire-fighting measures

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. 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 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. 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.

Date of issue/Date of revision : 5/24/2019 Date of previous issue : 1/23/2019 Version : 9 5/17

CM0724114 Epoxy Primer Adduct (MIL-P-23377F) Catalyst

### Section 7. Handling and storage

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
Xylene, mixed isomers	ACGIH TLV (United States, 3/2018).  TWA: 100 ppm 8 hours.  TWA: 434 mg/m³ 8 hours.  STEL: 150 ppm 15 minutes.  STEL: 651 mg/m³ 15 minutes.  OSHA PEL (United States, 5/2018).  TWA: 100 ppm 8 hours.  TWA: 435 mg/m³ 8 hours.
Isobutyl Acetate	NIOSH REL (United States, 10/2016).  TWA: 150 ppm 10 hours.  TWA: 700 mg/m³ 10 hours.  OSHA PEL (United States, 5/2018).  TWA: 150 ppm 8 hours.  TWA: 700 mg/m³ 8 hours.  ACGIH TLV (United States, 3/2018).  STEL: 150 ppm 15 minutes.  TWA: 50 ppm 8 hours.
Polyamidoamine Methyl Isobutyl Ketone	None.  ACGIH TLV (United States, 3/2018).  TWA: 20 ppm 8 hours.  STEL: 75 ppm 15 minutes.  NIOSH REL (United States, 10/2016).  TWA: 50 ppm 10 hours.  TWA: 205 mg/m³ 10 hours.  STEL: 75 ppm 15 minutes.  STEL: 300 mg/m³ 15 minutes.  OSHA PEL (United States, 5/2018).  TWA: 100 ppm 8 hours.  TWA: 410 mg/m³ 8 hours.
Ethylbenzene	ACGIH TLV (United States, 3/2018).  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/m³ 15 minutes.  OSHA PEL (United States, 5/2018).  TWA: 100 ppm 8 hours.  TWA: 435 mg/m³ 8 hours.
Triethylene Tetramine	AlHA WEEL (United States, 7/2018).  Absorbed through skin.  TWA: 1 ppm 8 hours.
4,4'-Isopropylidenediphenol	None.

Occupational exposure limits (Canada)

Catalyst

 Date of issue/Date of revision
 : 5/24/2019
 Date of previous issue
 : 1/23/2019
 Version
 : 9
 6/17

 CM0724114
 Epoxy Primer Adduct (MIL-P-23377F)
 SHW-85-NA-GHS-US

# Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Xylene	CA Alberta Provincial (Canada, 6/2018).  8 hrs OEL: 100 ppm 8 hours.  15 min OEL: 651 mg/m³ 15 minutes.  8 hrs OEL: 434 mg/m³ 8 hours.  CA British Columbia Provincial (Canada, 7/2018).  TWA: 100 ppm 8 hours.  STEL: 150 ppm 15 minutes.  CA Quebec Provincial (Canada, 1/2014).  TWAEV: 100 ppm 8 hours.  TWAEV: 434 mg/m³ 8 hours.  STEV: 150 ppm 15 minutes.  STEV: 651 mg/m³ 15 minutes.  STEV: 651 mg/m³ 15 minutes.  CA Ontario Provincial (Canada, 1/2018).  STEL: 150 ppm 15 minutes.  TWA: 100 ppm 8 hours.  CA Saskatchewan Provincial (Canada, 7/2013).  STEL: 150 ppm 15 minutes.
Isobutyl acetate	TWA: 100 ppm 8 hours.  CA Alberta Provincial (Canada, 6/2018).  8 hrs OEL: 150 ppm 8 hours.  8 hrs OEL: 713 mg/m³ 8 hours.  CA British Columbia Provincial (Canada, 7/2018).  TWA: 150 ppm 8 hours.  CA Ontario Provincial (Canada, 1/2018).  TWA: 150 ppm 8 hours.  CA Quebec Provincial (Canada, 1/2014).  TWAEV: 150 ppm 8 hours.  TWAEV: 713 mg/m³ 8 hours.  CA Saskatchewan Provincial (Canada, 7/2013).  STEL: 188 ppm 15 minutes.  TWA: 150 ppm 8 hours.
Methyl isobutyl ketone	CA Alberta Provincial (Canada, 6/2018). 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, 7/2018).  TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Ontario Provincial (Canada, 1/2018).  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: 75 ppm 15 minutes. STEV: 307 mg/m³ 15 minutes. STEV: 307 mg/m³ 15 minutes. STEV: 307 mg/m³ 15 minutes.  CA Saskatchewan Provincial (Canada, 7/2013).  STEL: 75 ppm 15 minutes. TWA: 50 ppm 8 hours.
Ethylbenzene	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 100 ppm 8 hours.
Pate of issue/Date of revision : 5/24/2019	Date of previous issue :1/23/2019 Version :9 7/1.

Date of issue/Date of revision 7/17 : 5/24/2019 Date of previous issue : 1/23/2019 Version: 9 CM0724114

Epoxy Primer Adduct (MIL-P-23377F) Catalyst

### Section 8. Exposure controls/personal protection

8 hrs OEL: 434 mg/m³ 8 hours. 15 min OEL: 543 mg/m³ 15 minutes. 15 min OEL: 125 ppm 15 minutes. CA British Columbia Provincial (Canada,

7/2018).

TWA: 20 ppm 8 hours.

CA Ontario Provincial (Canada, 1/2018).

TWA: 20 ppm 8 hours.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 100 ppm 8 hours. TWAEV: 434 mg/m³ 8 hours. STEV: 125 ppm 15 minutes. STEV: 543 mg/m³ 15 minutes.

CA Saskatchewan Provincial (Canada,

7/2013).

STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.

CA Ontario Provincial (Canada, 1/2018).

**Absorbed through skin.** TWA: 3 mg/m³ 8 hours. TWA: 0.5 ppm 8 hours.

### Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
Xylene, mixed isomers	NOM-010-STPS-2014 (Mexico, 4/2016).
	STEL: 150 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
Isobutyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 150 ppm 8 hours.
Methyl Isobutyl Ketone	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 50 ppm 8 hours.
	STEL: 75 ppm 15 minutes.
Ethylbenzene	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 20 ppm 8 hours.

## Appropriate engineering controls

Triethylenetetramine

: 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**

### **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 and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Skin protection

Date of issue/Date of revision : 5/24/2019 Date of previous issue : 1/23/2019 Version : 9 8/17

CM0724114 Epoxy Primer Adduct (MIL-P-23377F) Catalyst

### Section 8. Exposure controls/personal 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.
pH : Not available.
Melting point/freezing point : Not available.
Boiling point/boiling range : 110°C (230°F)

Flash point : Closed cup: 18°C (64.4°F) [Pensky-Martens Closed Cup]

**Evaporation rate** : 1.62 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Lower: 1% Upper: 7.5%

Vapor pressure : 2.1 kPa (16 mm Hg) [at 20°C]

**Vapor density** : 3.45 [Air = 1]

Relative density : 0.87

Solubility : Not available.

Partition coefficient: noctanol/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** : 24.464 kJ/g

 Date of issue/Date of revision
 : 5/24/2019
 Date of previous issue
 : 1/23/2019
 Version
 : 9
 9/17

 CM0724114
 Epoxy Primer Adduct (MIL-P-23377F)
 SHW-85-NA-GHS-US

Epoxy Primer Adduct (MIL-P-23377F)
Catalyst

### 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
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Isobutyl Acetate	LD50 Dermal	Rabbit	>17400 mg/kg	-
•	LD50 Oral	Rat	13400 mg/kg	-
Methyl Isobutyl Ketone	LD50 Oral	Rat	2080 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Triethylene Tetramine	LD50 Dermal	Rabbit	805 mg/kg	-
,	LD50 Oral	Rat	2500 mg/kg	-
4,4'-Isopropylidenediphenol	LD50 Oral	Rat	1200 mg/kg	-

### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene, mixed isomers	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	-
Isobutyl Acetate	Eyes - Moderate irritant	Rabbit	-	24 hours 500	-
				milligrams	
	Skin - Mild irritant	Rabbit	-	500	-
				milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				milligrams	
Methyl Isobutyl Ketone	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				microliters	
	Eyes - Severe irritant	Rabbit	-	40 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
Etha dhaanaa	Fire Original lands	D - 1-1-11		milligrams	
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500	-
	Claim Mild impitant	Dobbit		milligrams	
	Skin - Mild irritant	Rabbit	_	24 hours 15	-
				milligrams	

Date of issue/Date of revision

: 5/24/2019

Date of previous issue

: 1/23/2019

Version: 9

10/17

CM0724114 Epoxy Primer Adduct (MIL-P-23377F)

Catalyst

## Section 11. Toxicological information

### **Sensitization**

Not available.

### **Mutagenicity**

Not available.

### **Carcinogenicity**

Not available.

### **Classification**

Product/ingredient name	OSHA	IARC	NTP
Xylene, mixed isomers	-	3	-
Methyl Isobutyl Ketone	-	2B	-
Ethylbenzene	-	2B	-

### **Reproductive toxicity**

Not available.

### **Teratogenicity**

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 3	Not applicable.	Respiratory tract irritation
Isobutyl Acetate	Category 3	Not applicable.	Narcotic effects
Methyl Isobutyl Ketone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
4,4'-Isopropylidenediphenol	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Name	3 3 3	Route of exposure	Target organs	
Xylene, mixed isomers Methyl Isobutyl Ketone Ethylbenzene	Category 2	Not determined	Not determined Not determined Not determined	1

### **Aspiration hazard**

Name	Result
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

Date of issue/Date of revision: 5/24/2019Date of previous issue: 1/23/2019Version: 911/17CM0724114Epoxy Primer Adduct (MIL-P-23377F)<br/>CatalystSHW-85-NA-GHS-US

### Section 11. Toxicological information

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

**Eye contact** : Causes serious eye damage.

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. May be fatal if swallowed and

enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**: Adverse symptoms may include the following:

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

**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:

stomach pains nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects 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** 

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

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.

Date of issue/Date of revision : 5/24/2019 Date of previous issue : 1/23/2019 Version : 9 12/17

CM0724114 Epoxy Primer Adduct (MIL-P-23377F)

Catalyst

## Section 11. Toxicological information

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 : May damage fertility.

### **Numerical measures of toxicity**

**Acute toxicity estimates** 

Route	ATE value
Oral	5284.8 mg/kg
Dermal	2288.6 mg/kg
Inhalation (gases)	8042 ppm
Inhalation (vapors)	31.81 mg/l

## **Section 12. Ecological information**

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Xylene, mixed isomers	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 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 - Embryo	33 days
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 6.53 mg/l Marine water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 2.93 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 μg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Triethylene Tetramine	Acute EC50 3700 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 33900 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
4,4'-Isopropylidenediphenol	Acute EC50 1000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 1.506 mg/l Marine water	Algae - Prorocentrum minimum - Exponential growth phase	72 hours
	Acute EC50 7.75 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 50.4 µg/l Marine water	Crustaceans - Artemia sinica	48 hours
	Acute LC50 3.5 mg/l Marine water	Fish - Rivulus marmoratus - Embryo	96 hours
	Chronic NOEC 2 mg/l Fresh water	Algae - Chlorolobion braunii - Exponential growth phase	4 days
	Chronic NOEC 10 µg/l Marine water	Crustaceans - Tigriopus japonicus - Nauplii	21 days
	Chronic NOEC 30 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.2 µg/l Fresh water	Fish - Carassius auratus - Adult	90 days

### Persistence and degradability

Date of issue/Date of revision : 5/24/2019 Date of previous issue : 1/23/2019 Version : 9 13/17

CM0724114 Epoxy Primer Adduct (MIL-P-23377F)

Catalyst

### **Section 12. Ecological information**

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene, mixed isomers	-	-	Readily
Methyl Isobutyl Ketone	-	-	Readily
Ethylbenzene	-	-	Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Xylene, mixed isomers	-	8.1 to 25.9	low
4,4'-Isopropylidenediphenol	-	20 to 67	low

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

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 RELATED MATERIAL				
Transport hazard class(es)	3	3	3	3	3
Packing group	II	II	II	II	II
Environmental hazards	No.	No.	No.	No.	No.

Date of issue/Date of revision

CM0724114

: 5/24/2019

Date of previous issue

Version: 9

: 1/23/2019

14/17

Epoxy Primer Adduct (MIL-P-23377F)

Catalyst

#### Section 14. Transport information **Additional** Product classified **Emergency** information as per the schedules F-E, Sfollowing sections of the Transportation of **Dangerous Goods** Regulations: 2. 18-2.19 (Class 3). 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 : Not available. to Annex II of MARPOL and the IBC Code

Proper shipping name : Not available. : Not available. Ship type : Not available. **Pollution category** 

### 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.

#### International regulations

**International lists** 

: Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined. Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined. Korea inventory (KECI): Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

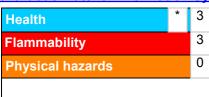
Philippines inventory (PICCS): Not determined.

Taiwan Chemical Substances Inventory (TCSI): Not determined.

Thailand inventory: Not determined. Turkey inventory: Not determined. Vietnam inventory: Not determined.

### 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.

Date of issue/Date of revision : 1/23/2019 15/17 : 5/24/2019 Date of previous issue Version: 9 CM0724114 Epoxy Primer Adduct (MIL-P-23377F) SHW-85-NA-GHS-US Catalyst

### Section 16. Other information

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
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION (Fertility) - Category 1B	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
ASPIRATION HAZARD - Category 1	Calculation method

### **History**

**Date of printing** 5/24/2019 Date of issue/Date of : 5/24/2019

revision

Date of previous issue : 1/23/2019

Version 9

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 = Intermediate 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

### Indicates information that has changed from previously issued version.

#### **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 the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. 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.

Date of issue/Date of revision 16/17 : 5/24/2019 Date of previous issue : 1/23/2019 Version: 9 CM0724114 Epoxy Primer Adduct (MIL-P-23377F) SHW-85-NA-GHS-US

Date of issue/Date of revision : 5/24/2019 Date of previous issue : 1/23/2019 Version : 9 17/17

CM0724114 Epoxy Primer Adduct (MIL-P-23377F)
Catalyst SHW-85-NA-GHS-US