



SAFETY DATA SHEET

Issuing Date: 14-Jan-2016

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: EP-2-Y1

Product Name: HI-SOLIDS YELLOW EPOXY PRIMER

Hentzen Coatings, Inc.
6937 West Mill Road, Milwaukee, WI 53218-1225

Company Phone Number: 1-414-353-4200
Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use Industrial paint (Paint or Paint-Related), Restricted to professional users

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 2
Flammable Liquids	Category 2

Label Elements

Emergency Overview

DANGER

Hazard Statements

Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause cancer
Suspected of damaging fertility or the unborn child
Highly flammable liquid and vapor



Appearance Opaque

Physical state Liquid

Odor Solvent

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Keep container tightly closed
 Ground/Bond container and receiving equipment
 Use explosion-proof electrical/ ventilating/ lighting/ equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/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 advice/attention
 If skin irritation or rash occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool
 Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

- Toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains a known or suspected carcinogen

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
STRONTIUM CHROMATE	7789-06-2	10% - 20%	TWA: 0.0005 mg/m ³ Cr	TWA: 5 µg/m ³ Ceiling: 0.1 mg/m ³ CrO ₃ applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect
QUARTZ CRYSTALLINE SILICA	14808-60-7	10% - 20%	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 50 µg/m ³ TWA: 50 µg/m ³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction
ACETONE	67-64-1	5% - 10%	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³

TITANIUM DIOXIDE	13463-67-7	5% - 10%	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust
METHYL AMYL KETONE	110-43-0	1% - 5%	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³
CYCLOHEXANONE	108-94-1	1% - 5%	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m ³
XYLENE(PURE)	1330-20-7	1% - 5%	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³
TALC	14807-96-6	1% - 5%	TWA: 2 mg/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 20 mppcf if 1% Quartz or more; use Quartz limit
METHYL ISOBUTYL KETONE	108-10-1	1% - 5%	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³
TOLUENE	108-88-3	0% - 1%	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm
ETHYLBENZENE	100-41-4	0% - 1%	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³

4. FIRST AID MEASURES

First Aid Measures

General advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Eye Contact	Immediately flush eyes with water for at least 15 minutes. Get medical attention. If easy to do, remove contact lenses. Keep eye wide open while rinsing. Call a physician immediately.
Skin Contact	Wash off immediately with soap and plenty of water.
Inhalation	Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required. If not breathing, give artificial respiration.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician immediately.
Self-protection of the first aider	Remove all sources of ignition.
Most important symptoms and effects, both acute and delayed	
Most Important Symptoms and Effects	No information available.
Indication of any immediate medical attention and special treatment needed	
Notes to physician	May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Extremely flammable.

Explosion Data

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment as required. Avoid breathing vapors or mists. Ventilate the area.

Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilation and lighting) equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks and flame. Keep containers tightly closed in a cool, well-ventilated place.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH	OSHA	NIOSH IDLH
STRONTIUM CHROMATE 7789-06-2	TWA: 0.0005 mg/m ³ Cr	TWA: 5 µg/m ³ Ceiling: 0.1 mg/m ³ CrO ₃ applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect	IDLH: 15 mg/m ³ Cr(VI) TWA: 0.0002 mg/m ³ Cr
QUARTZ CRYSTALLINE SILICA 14808-60-7	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 50 µg/m ³ TWA: 50 µg/m ³ excludes construction work, agricultural operations, and	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust

		exposures that result from the processing of sorptive clays : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	
ACETONE 67-64-1	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³
MICA 12001-26-2	TWA: 3 mg/m ³ respirable particulate matter	TWA: 20 mppcf <1% Crystalline silica	IDLH: 1500 mg/m ³ TWA: 3 mg/m ³ containing <1% Quartz respirable dust
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust	IDLH: 5000 mg/m ³
METHYL AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m ³
CYCLOHEXANONE 108-94-1	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m ³	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m ³
XYLENE(PURE) 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³	
SILICEOUS EXTENDER PIGMENT 66402-68-4	STEL: 10 mg/m ³ Zr TWA: 5 mg/m ³ Zr TWA: 0.02 mg/m ³ Mn respirable particulate matter TWA: 0.1 mg/m ³ Mn inhalable particulate matter	TWA: 5 mg/m ³ Zr	IDLH: 25 mg/m ³ Zr TWA: 5 mg/m ³ except Zirconium tetrachloride Zr STEL: 10 mg/m ³ Zr
TALC 14807-96-6	TWA: 2 mg/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 20 mppcf if 1% Quartz or more;use Quartz limit	IDLH: 1000 mg/m ³ TWA: 2 mg/m ³ containing no Asbestos and <1% Quartz respirable dust
METHYL ISOBUTYL KETONE 108-10-1	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³	IDLH: 500 ppm TWA: 50 ppm TWA: 205 mg/m ³ STEL: 75 ppm STEL: 300 mg/m ³
TOLUENE 108-88-3	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³
ETHYLBENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³
CYCLOHEXANONE 108-94-1	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m ³	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Use personal protective equipment as required.

Skin and Body Protection

Chemical resistant apron.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Appearance	Opaque
Odor	Solvent.	Odor Threshold	No data available
pH	No data available	Flash Point	-4 °F / -20 °C
Decomposition temperature	No data available	Boiling Point	133 °F / 56 °C
Melting Point / Melting Range	No data available	Freezing Point	No data available
Vapor Pressure @20°C (kPa)	No data available	Partition coefficient:	No data available
Vapor Density	No data available	Density	No data available
Bulk density	No data available	Specific Gravity	1.55
Evaporation Rate	No data available	Water solubility	No data available
Dynamic viscosity	No data available	Weight per Gallon (lbs/gal):	12.93
		Flammability Limits in Air	
		Upper	1.96 %
		Lower	0.32 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	The product has not been tested
Inhalation	There is no data for this product.
Eye Contact	There is no data for this product.
Skin Contact	There is no data for this product.
Ingestion	There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
STRONTIUM CHROMATE 7789-06-2	= 811 mg/kg (Rat)	N/A	N/A
ACETONE 67-64-1	= 5800 mg/kg (Rat)	> 15700 mg/kg (Rabbit)	= 50100 mg/m ³ (Rat) 8 h
TITANIUM DIOXIDE 13463-67-7	> 10000 mg/kg (Rat)	N/A	N/A
METHYL AMYL KETONE 110-43-0	= 1600 mg/kg (Rat)	= 12.6 mL/kg (Rabbit)	2000 - 4000 ppm (Rat) 6 h
CYCLOHEXANONE 108-94-1	= 1544 mg/kg (Rat)	= 947 mg/kg (Rabbit)	= 8000 ppm (Rat) 4 h
XYLENE(PURE)	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h

1330-20-7			
METHYL ISOBUTYL KETONE 108-10-1	= 2080 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	= 8.2 mg/L (Rat) 4 h
TOLUENE 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
ETHYLBENZENE 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
CYCLOHEXANONE 108-94-1	= 1544 mg/kg (Rat)	= 947 mg/kg (Rabbit)	= 8000 ppm (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

MUTAGENIC EFFECTS No information available.

Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
STRONTIUM CHROMATE 7789-06-2	A2	Group 1	Known	X
QUARTZ CRYSTALLINE SILICA 14808-60-7	A2	Group 1	Known	X
TITANIUM DIOXIDE 13463-67-7	N/A	Group 2B	N/A	X
CYCLOHEXANONE 108-94-1	A3	Group 3	N/A	N/A
XYLENE(PURE) 1330-20-7	N/A	Group 3	N/A	N/A
TALC 14807-96-6	N/A	Group 2B Group 3	N/A	X
METHYL ISOBUTYL KETONE 108-10-1	A3	Group 2B	N/A	X
TOLUENE 108-88-3	N/A	Group 3	N/A	N/A
ETHYLBENZENE 100-41-4	A3	Group 2B	N/A	X
CYCLOHEXANONE 108-94-1	A3	Group 3	N/A	N/A

Legend:

- ACGIH (American Conference of Governmental Industrial Hygienists)
- A2 - Suspected Human Carcinogen
- A3 - Animal Carcinogen
- IARC (International Agency for Research on Cancer)
- Group 1 - Carcinogenic to Humans
- Group 2B - Possibly Carcinogenic to Humans
- Group 3 - Not Classifiable as to Carcinogenicity in Humans
- NTP (National Toxicology Program)
- Known - Known Carcinogen
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- X - Present

Reproductive Toxicity No information available.

Specific target organ systemic toxicity (single exposure) No information available.

Specific target organ systemic toxicity (repeated exposure) No information available.

Chronic Toxicity Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.

Target Organ Effects Blood, Central nervous system (CNS), Central Vascular System (CVS), Eyes, Kidney, Liver,

Aspiration hazard Lungs, Peripheral Nervous System (PNS), Respiratory system, Skin.
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	1501 mg/kg
ATEmix (dermal)	5893 mg/kg
ATEmix (inhalation-dust/mist)	5.5 mg/l
Oral LD50	2978 mg/kg (rat) Estimated
Dermal LD50	15601 mg/kg (rat) Estimated

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
ACETONE 67-64-1	N/A	4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
METHYL AMYL KETONE 110-43-0	N/A	126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	N/A
CYCLOHEXANONE 108-94-1	N/A	481 - 578: 96 h Pimephales promelas mg/L LC50 flow-through 8.9: 96 h Pimephales promelas mg/L LC50	N/A
XYLENE(PURE) 1330-20-7	N/A	13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 13.4: 96 h Pimephales promelas mg/L LC50 flow-through 19: 96 h Lepomis macrochirus mg/L LC50 780: 96 h Cyprinus carpio mg/L LC50 semi-static 780: 96 h Cyprinus carpio mg/L LC50	0.6: 48 h Gammarus lacustris mg/L LC50 3.82: 48 h water flea mg/L EC50
TALC 14807-96-6	N/A	100: 96 h Brachydanio rerio g/L LC50 semi-static	N/A
METHYL ISOBUTYL KETONE 108-10-1	400: 96 h Pseudokirchneriella subcapitata mg/L EC50	496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through	170: 48 h Daphnia magna mg/L EC50
TOLUENE 108-88-3	12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 433: 96 h Pseudokirchneriella subcapitata mg/L EC50	11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 12.6: 96 h Pimephales promelas mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 54: 96 h Oryzias latipes mg/L LC50 static	5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static 11.5: 48 h Daphnia magna mg/L EC50
ETHYLBENZENE 100-41-4	1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 2.6 -	11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 7.55 - 11:	1.8 - 2.4: 48 h Daphnia magna mg/L EC50

	11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50	96 h Pimephales promelas mg/L LC50 flow-through 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 9.6: 96 h Poecilia reticulata mg/L LC50 static	
CYCLOHEXANONE 108-94-1	N/A	481 - 578: 96 h Pimephales promelas mg/L LC50 flow-through 8.9: 96 h Pimephales promelas mg/L LC50	N/A

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
ACETONE 67-64-1	-0.24
METHYL AMYL KETONE 110-43-0	1.98
CYCLOHEXANONE 108-94-1	0.86
XYLENE(PURE) 1330-20-7	3.15
METHYL ISOBUTYL KETONE 108-10-1	1.19
TOLUENE 108-88-3	2.7
ETHYLBENZENE 100-41-4	3.2

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste treatment methods

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

US EPA Waste Number

D001

Chemical Name	RCRA - Basis for Listing	RCRA - D Series Wastes
ACETONE 67-64-1	Included in waste stream: F039	N/A
CYCLOHEXANONE 108-94-1	Included in waste stream: F039	N/A
XYLENE(PURE) 1330-20-7	Included in waste stream: F039	N/A
METHYL ISOBUTYL KETONE 108-10-1	Included in waste stream: F039	N/A
TOLUENE 108-88-3	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151	N/A
ETHYLBENZENE 100-41-4	Included in waste stream: F039	N/A
CYCLOHEXANONE 108-94-1	Included in waste stream: F039	N/A

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
TOLUENE 108-88-3	N/A	N/A	Toxic waste waste number F025	N/A

			Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	
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This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
STRONTIUM CHROMATE 7789-06-2	Toxic Corrosive Ignitable
ACETONE 67-64-1	Ignitable
XYLENE(PURE) 1330-20-7	Toxic Ignitable
SILICEOUS EXTENDER PIGMENT 66402-68-4	Toxic
TOLUENE 108-88-3	Toxic Ignitable
ETHYLBENZENE 100-41-4	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions 149, B52, IB2, T4, TP1, TP8, TP28
Description UN1263, Paint, Marine Pollutant, 3, II, RQ
Emergency Response Guide Number 128

TDG

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Description UN1263, Paint, Marine Pollutant, 3, II

MEX

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II

Special Provisions A3, A72
Description UN1263, Paint, 3, II

IATA

UN-No UN1263
Hazard class 3
Packing Group II
ERG Code 3L
Special Provisions A3, A72, A192

IMDG/IMO

UN-No UN1263
Hazard class 3
Packing Group II
EmS-No F-E, S-E
Special Provisions 163, 367

RID

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Description UN1263, Paint, Environmentally Hazardous, 3, II

ADR/RID

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Tunnel restriction code (D/E)
Special Provisions 163, 640C, 650, 367
Description UN1263, Paint, Environmentally Hazardous, 3, II, (D/E)
ADR/RID-Labels 3

ADN

Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Special Provisions 163, 640C, 650
Description UN1263, Paint, Environmentally Hazardous, 3, II
Hazard Labels 3
Limited Quantity (LQ) 5 L
Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	SARA 313 - Threshold Values %
STRONTIUM CHROMATE	7789-06-2	0.1
XYLENE(PURE)	1330-20-7	1.0
SILICEOUS EXTENDER PIGMENT	66402-68-4	1.0
METHYL ISOBUTYL KETONE	108-10-1	1.0
ETHYLBENZENE	100-41-4	0.1

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CAA (Clean Air Act)

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:

Chemical Name	CAS No	Hazardous air pollutants (HAPs) content
STRONTIUM CHROMATE	7789-06-2	Present
XYLENE(PURE)	1330-20-7	Present
METHYL ISOBUTYL KETONE	108-10-1	Present
TOLUENE	108-88-3	Present
ETHYLBENZENE	100-41-4	Present

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
STRONTIUM CHROMATE	10 lb	X	N/A	X
XYLENE(PURE)	100 lb	N/A	N/A	X
SILICEOUS EXTENDER PIGMENT	N/A	X	N/A	N/A
TOLUENE	1000 lb	X	X	X
ETHYLBENZENE	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ (reportable quantity)
STRONTIUM CHROMATE	10 lb	N/A	RQ 10 lb final RQ RQ 4.54 kg final RQ
ACETONE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
CYCLOHEXANONE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
XYLENE(PURE)	100 lb	N/A	RQ 100 lb final RQ RQ 45.4 kg final RQ
METHYL ISOBUTYL KETONE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ

TOLUENE	1000 lb 1 lb	N/A	RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
ETHYLBENZENE	1000 lb	N/A	RQ 1000 lb final RQ RQ 454 kg final RQ
CYCLOHEXANONE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	CAS No	California Proposition 65
STRONTIUM CHROMATE	7789-06-2	Carcinogen Developmental Female Reproductive Male Reproductive
QUARTZ CRYSTALLINE SILICA	14808-60-7	Carcinogen
TITANIUM DIOXIDE	13463-67-7	Carcinogen
METHYL ISOBUTYL KETONE	108-10-1	Carcinogen Developmental
TOLUENE	108-88-3	Developmental
ETHYLBENZENE	100-41-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
STRONTIUM CHROMATE	X	X	X	X	X
QUARTZ CRYSTALLINE SILICA	X	X	X	X	X
ACETONE	X	X	X	N/A	N/A
MICA	X	X	X	N/A	X
TITANIUM DIOXIDE	X	X	X	N/A	X
METHYL AMYL KETONE	X	X	X	N/A	X
CYCLOHEXANONE	X	X	X	X	N/A
XYLENE(PURE)	X	X	X	X	X
SILICEOUS EXTENDER PIGMENT	N/A	X	X	X	N/A
TALC	X	X	X	X	N/A
METHYL ISOBUTYL KETONE	X	X	X	X	X
TOLUENE	X	X	X	X	X
ETHYLBENZENE	X	X	X	X	X

International Regulations

Mexico - Grade

Serious risk, Grade 3

Chemical Name	Carcinogenic Status	Exposure Limits
STRONTIUM CHROMATE	A1	Mexico: TWA 0.01 mg/m ³ Mexico: TWA 0.5 mg/m ³
QUARTZ CRYSTALLINE SILICA	N/A	Mexico: TWA 0.1 mg/m ³
ACETONE	N/A	Mexico: TWA 1000 ppm Mexico: TWA 2400 mg/m ³ Mexico: STEL 1260 ppm Mexico: STEL 3000 mg/m ³
MICA	N/A	Mexico: TWA 3 mg/m ³
TITANIUM DIOXIDE	N/A	Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³
METHYL AMYL KETONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 235 mg/m ³ Mexico: STEL 100 ppm Mexico: STEL 465 mg/m ³
CYCLOHEXANONE	N/A	Mexico: TWA 50 ppm

		Mexico: TWA 200 mg/m ³ Mexico: STEL 100 ppm Mexico: STEL 400 mg/m ³
XYLENE(PURE)	N/A	Mexico: TWA 100 ppm Mexico: TWA 435 mg/m ³ Mexico: STEL 150 ppm Mexico: STEL 655 mg/m ³
SILICEOUS EXTENDER PIGMENT	N/A	Mexico: TWA 5 mg/m ³ Mexico: TWA 0.2 mg/m ³ Mexico: STEL 10 mg/m ³
TALC	N/A	Mexico: TWA 2 mg/m ³
METHYL ISOBUTYL KETONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 205 mg/m ³ Mexico: STEL 75 ppm Mexico: STEL 307 mg/m ³
TOLUENE	N/A	Mexico: TWA 50 ppm Mexico: TWA 188 mg/m ³
ETHYLBENZENE	N/A	Mexico: TWA 100 ppm Mexico: TWA 435 mg/m ³ Mexico: STEL 125 ppm Mexico: STEL 545 mg/m ³
CYCLOHEXANONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 200 mg/m ³ Mexico: STEL 100 ppm Mexico: STEL 400 mg/m ³

16. OTHER INFORMATION

NFPA **Health Hazard 2** **Flammability 3** **Instability 0** **Physical and Chemical Hazards -**

NFPA Rating



HMIS **Health Hazard 2 *** **Flammability 3** **Physical Hazard 0** **Personal protection X**

Chronic Hazard Star Legend

** Chronic Health Hazard*

Issuing Date: 14-Jan-2016

Revision Date: 16-Dec-2017

Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. EP-2-Y1GV

end



SAFETY DATA SHEET

Issuing Date: 15-May-2015

Revision Date: 07-Sep-2018

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: EH-12

Product Name: EPOXY HARDENER

Hentzen Coatings, Inc.
6937 West Mill Road, Milwaukee, WI 53218-1225

Company Phone Number: 1-414-353-4200
Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use Industrial paint (Paint or Paint-Related), Restricted to professional users

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 2

Label Elements

Emergency Overview

DANGER

Hazard Statements
 Harmful if swallowed
 harmful if inhaled
 Causes skin irritation
 Causes serious eye damage
 May cause an allergic skin reaction
 May cause cancer
 Suspected of damaging fertility or the unborn child
 May cause damage to organs through prolonged or repeated exposure
 Highly flammable liquid and vapor

Appearance Opaque **Physical state** Liquid **Odor** Solvent

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Use only outdoors or in a well-ventilated area
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Do not breathe dust/fume/gas/mist/vapors/spray
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Keep container tightly closed
 Ground/Bond container and receiving equipment
 Use explosion-proof electrical/ ventilating/ lighting/ equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/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 doctor/physician
 If skin irritation or rash occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool
 Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

- May be harmful in contact with skin
- Toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains a known or suspected carcinogen

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
XYLENE(PURE)	1330-20-7	10% - 20%	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³
BENZYL ALCOHOL	100-51-6	5% - 10%	N/A	N/A
BUTYL ALCOHOL	71-36-3	5% - 10%	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m ³
TOLUENE	108-88-3	5% - 10%	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm
ETHYLBENZENE	100-41-4	1% - 5%	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³
ISOPROPYL ALCOHOL	67-63-0	1% - 5%	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³
TRIETHYLENETETRAMINE(TETA)	112-24-3	1% - 5%	N/A	N/A
TETRAETHYENEPENTAMINE(TEPA)	112-57-2	1% - 5%	N/A	N/A

4. FIRST AID MEASURES

First Aid Measures

General advice	Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.
Eye Contact	Immediately flush eyes with water for at least 15 minutes. Get medical attention. If easy to do, remove contact lenses. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Remove and wash contaminated clothing and gloves, including the inside, before re-use. If skin irritation persists, call a physician. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Inhalation	Remove to fresh air. Consult a physician if necessary. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
Ingestion	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Self-protection of the first aider	Remove all sources of ignition. Use personal protective equipment as required.
Most important symptoms and effects, both acute and delayed	
Most Important Symptoms and Effects	No information available.
Indication of any immediate medical attention and special treatment needed	
Notes to physician	Treat symptomatically. May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Extremely flammable. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact.

Explosion Data

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists. Ventilate the area.
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Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilation and lighting) equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use with local exhaust ventilation. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe vapor or mist. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks and flame.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH	OSHA	NIOSH IDLH
XYLENE(PURE) 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³	
BUTYL ALCOHOL 71-36-3	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m ³	IDLH: 1400 ppm Ceiling: 50 ppm Ceiling: 150 mg/m ³
TOLUENE 108-88-3	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³
ETHYLBENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³
ISOPROPYL ALCOHOL 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³

NIOSH IDLH: *Immediately Dangerous to Life or Health*

Exposure controls

Engineering Measures Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use personal protective equipment as required.

Skin and Body Protection Chemical resistant apron.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Appearance	Opaque
Odor	Solvent.	Odor Threshold	No data available
pH	No data available	Flash Point	12 °F / -11 °C
Decomposition temperature	No data available	Boiling Point	145 °F / 63 °C
Melting Point / Melting Range	No data available	Freezing Point	No data available
Vapor Pressure @20°C (kPa)	No data available	Partition coefficient:	No data available
Vapor Density	No data available	Density	No data available
Bulk density	No data available	Specific Gravity	0.95
Evaporation Rate	No data available	Water solubility	No data available
Dynamic viscosity	No data available	Weight per Gallon (lbs/gal):	7.91
		Flammability Limits in Air	
		Upper	2.56 %
		Lower	0.4 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information The product has not been tested

Inhalation There is no data for this product.

Eye Contact There is no data for this product.

Skin Contact There is no data for this product.

Ingestion

There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
XYLENE(PURE) 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h
BENZYL ALCOHOL 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
BUTYL ALCOHOL 71-36-3	= 700 mg/kg (Rat)	= 3402 mg/kg (Rabbit)	> 8000 ppm (Rat) 4 h
TOLUENE 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
ETHYLBENZENE 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
ISOPROPYL ALCOHOL 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
TRIETHYLENETETRAMINE(TETA) 112-24-3	= 2500 mg/kg (Rat)	= 550 mg/kg (Rabbit)	N/A
TETRAETHYENEPENTAMINE(TEPA) 112-57-2	= 3990 mg/kg (Rat)	= 660 µL/kg (Rabbit)	N/A

Information on toxicological effects**Symptoms**

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Sensitization**

No information available.

MUTAGENIC EFFECTS

No information available.

Carcinogenicity

This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
XYLENE(PURE) 1330-20-7	N/A	Group 3	N/A	N/A
TOLUENE 108-88-3	N/A	Group 3	N/A	N/A
ETHYLBENZENE 100-41-4	A3	Group 2B	N/A	X
ISOPROPYL ALCOHOL 67-63-0	N/A	Group 3	N/A	X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive Toxicity

No information available.

Specific target organ systemic toxicity (single exposure)

No information available.

Specific target organ systemic toxicity (repeated exposure)

No information available.

Chronic Toxicity

Avoid repeated exposure. May cause adverse liver effects. Repeated contact may cause allergic reactions in very susceptible persons.

Target Organ Effects

Central nervous system (CNS), Eyes, Kidney, Liver, Respiratory system, Skin.

Aspiration hazard

No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)

1703 mg/kg

ATEmix (dermal)	2239 mg/kg
ATEmix (inhalation-dust/mist)	3 mg/l
Oral LD50	3467 mg/kg (rat) Estimated
Dermal LD50	6658 mg/kg (rat) Estimated

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
XYLENE(PURE) 1330-20-7	N/A	13.1 - 16.5: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 13.5 - 17.3: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 2.661 - 4.093: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 23.53 - 29.97: 96 h <i>Pimephales promelas</i> mg/L LC50 static 30.26 - 40.75: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 7.711 - 9.591: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 13.4: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 19: 96 h <i>Lepomis macrochirus</i> mg/L LC50 780: 96 h <i>Cyprinus carpio</i> mg/L LC50 semi-static 780: 96 h <i>Cyprinus carpio</i> mg/L LC50	0.6: 48 h <i>Gammarus lacustris</i> mg/L LC50 3.82: 48 h water flea mg/L EC50
BENZYL ALCOHOL 100-51-6	N/A	10: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 460: 96 h <i>Pimephales promelas</i> mg/L LC50 static	23: 48 h water flea mg/L EC50
BUTYL ALCOHOL 71-36-3	500: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 500: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	100000 - 500000: 96 h <i>Lepomis macrochirus</i> µg/L LC50 static 1730 - 1910: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1740: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 1910000: 96 h <i>Pimephales promelas</i> µg/L LC50 static	1897 - 2072: 48 h <i>Daphnia magna</i> mg/L EC50 Static 1983: 48 h <i>Daphnia magna</i> mg/L EC50
TOLUENE 108-88-3	12.5: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 433: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	11.0 - 15.0: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 14.1 - 17.16: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 15.22 - 19.05: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 5.89 - 7.81: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 50.87 - 70.34: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 12.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static 28.2: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 5.8: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 54: 96 h <i>Oryzias latipes</i> mg/L LC50 static	5.46 - 9.83: 48 h <i>Daphnia magna</i> mg/L EC50 Static 11.5: 48 h <i>Daphnia magna</i> mg/L EC50
ETHYLBENZENE 100-41-4	1.7 - 7.6: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 2.6 - 11.3: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 4.6: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 438: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	11.0 - 18.0: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 7.55 - 11: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 9.1 - 15.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static 32: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 4.2: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 9.6: 96 h <i>Poecilia reticulata</i> mg/L LC50 static	1.8 - 2.4: 48 h <i>Daphnia magna</i> mg/L EC50
ISOPROPYL ALCOHOL 67-63-0	1000: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 1000: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	11130: 96 h <i>Pimephales promelas</i> mg/L LC50 static 9640: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 1400000: 96 h	13299: 48 h <i>Daphnia magna</i> mg/L EC50

TRIETHYLENETETRAMINE(TETA) 112-24-3	2.5: 72 h Desmodemus subspicatus mg/L EC50 20: 72 h Pseudokirchneriella subcapitata mg/L EC50 3.7: 96 h Pseudokirchneriella subcapitata mg/L EC50	Lepomis macrochirus µg/L LC50 495: 96 h Pimephales promelas mg/L LC50 570: 96 h Poecilia reticulata mg/L LC50 semi-static	31.1: 48 h Daphnia magna mg/L EC50
TETRAETHYENEPENTAMINE(TEPA) 112-57-2	2.1: 72 h Pseudokirchneriella subcapitata mg/L EC50	420: 96 h Poecilia reticulata mg/L LC50 static	24.1: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
XYLENE(PURE) 1330-20-7	3.15
BENZYL ALCOHOL 100-51-6	1.1
BUTYL ALCOHOL 71-36-3	0.785
TOLUENE 108-88-3	2.7
ETHYLBENZENE 100-41-4	3.2
ISOPROPYL ALCOHOL 67-63-0	0.05
TRIETHYLENETETRAMINE(TETA) 112-24-3	-1.4
TETRAETHYENEPENTAMINE(TEPA) 112-57-2	1

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste treatment methods**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

US EPA Waste Number

D001

Chemical Name	RCRA - Basis for Listing	RCRA - D Series Wastes
XYLENE(PURE) 1330-20-7	Included in waste stream: F039	N/A
BUTYL ALCOHOL 71-36-3	Included in waste stream: F039	N/A
TOLUENE 108-88-3	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151	N/A
ETHYLBENZENE 100-41-4	Included in waste stream: F039	N/A

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
TOLUENE 108-88-3	N/A	N/A	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic	N/A

			hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	
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This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
XYLENE(PURE) 1330-20-7	Toxic Ignitable
BUTYL ALCOHOL 71-36-3	Toxic
TOLUENE 108-88-3	Toxic Ignitable
ETHYLBENZENE 100-41-4	Toxic Ignitable
ISOPROPYL ALCOHOL 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Special Provisions 149, B52, IB2, T4, TP1, TP8, TP28
 Description UN1263, Paint, 3, II, RQ
 Emergency Response Guide Number 128

TDG

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Description UN1263, Paint, 3, II

MEX

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Special Provisions A3, A72
 Description UN1263, Paint, 3, II

IATA

UN-No UN1263
 Hazard class 3
 Packing Group II
 ERG Code 3L

Special Provisions A3, A72, A192

IMDG/IMO

UN-No UN1263
Hazard class 3
Packing Group II
EmS-No F-E, S-E
Special Provisions 163, 367

RID

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Description UN1263, Paint, 3, II

ADR/RID

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Tunnel restriction code (D/E)
Special Provisions 163, 640C, 650, 367
Description UN1263, Paint, 3, II, (D/E)
ADR/RID-Labels 3

ADN

Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Special Provisions 163, 640C, 650
Description UN1263, Paint, 3, II
Hazard Labels 3
Limited Quantity (LQ) 5 L
Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	SARA 313 - Threshold Values %
XYLENE(PURE)	1330-20-7	1.0
BUTYL ALCOHOL	71-36-3	1.0
TOLUENE	108-88-3	1.0
ETHYLBENZENE	100-41-4	0.1
ISOPROPYL ALCOHOL	67-63-0	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CAA (Clean Air Act)

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:

Chemical Name	CAS No	Hazardous air pollutants (HAPs) content
XYLENE(PURE)	1330-20-7	Present
TOLUENE	108-88-3	Present
ETHYLBENZENE	100-41-4	Present

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE(PURE)	100 lb	N/A	N/A	X
TOLUENE	1000 lb	X	X	X
ETHYLBENZENE	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ (reportable quantity)
XYLENE(PURE)	100 lb	N/A	RQ 100 lb final RQ RQ 45.4 kg final RQ
BUTYL ALCOHOL	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
TOLUENE	1000 lb 1 lb	N/A	RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
ETHYLBENZENE	1000 lb	N/A	RQ 1000 lb final RQ RQ 454 kg final RQ

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	CAS No	California Proposition 65
TOLUENE	108-88-3	Developmental
ETHYLBENZENE	100-41-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
XYLENE(PURE)	X	X	X	X	X
BUTYL ALCOHOL	X	X	X	N/A	N/A
TOLUENE	X	X	X	X	X
ETHYLBENZENE	X	X	X	X	X
ISOPROPYL ALCOHOL	X	X	X	N/A	N/A
TRIETHYLENETETRAMINE (TETA)	X	X	X	N/A	N/A
TETRAETHYENEPENTAMINE(TEPA)	X	X	X	N/A	N/A

International Regulations

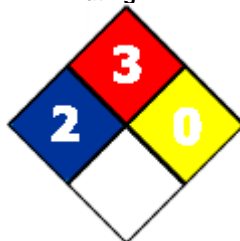
Mexico - Grade Serious risk, Grade 3

Chemical Name	Carcinogenic Status	Exposure Limits
XYLENE(PURE)	N/A	Mexico: TWA 100 ppm Mexico: TWA 435 mg/m ³ Mexico: STEL 150 ppm Mexico: STEL 655 mg/m ³
BUTYL ALCOHOL	N/A	Mexico: Ceiling 50 ppm Mexico: Ceiling 150 mg/m ³
TOLUENE	N/A	Mexico: TWA 50 ppm Mexico: TWA 188 mg/m ³
ETHYLBENZENE	N/A	Mexico: TWA 100 ppm Mexico: TWA 435 mg/m ³ Mexico: STEL 125 ppm Mexico: STEL 545 mg/m ³
ISOPROPYL ALCOHOL	N/A	Mexico: TWA 400 ppm Mexico: TWA 980 mg/m ³ Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m ³

16. OTHER INFORMATION

NFPA Health Hazard 2 Flammability 3 Instability 0 Physical and Chemical Hazards -

NFPA Rating



HMIS Health Hazard 1 * Flammability 3 Physical Hazard 0 Personal protection X

Chronic Hazard Star Legend

* Chronic Health Hazard

Issuing Date: 15-May-2015

Revision Date: 07-Sep-2018

Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information

relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. EH-12GV

end



SAFETY DATA SHEET

Issuing Date: 12-May-2015

Revision Date: 07-Sep-2018

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: SC-11

Product Name: SOLVENT CATALYST

Hentzen Coatings, Inc.
6937 West Mill Road, Milwaukee, WI 53218-1225

Company Phone Number: 1-414-353-4200
Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use Industrial paint (Paint or Paint-Related), Restricted to professional users

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)


Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 2
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 2

Label Elements

Emergency Overview

DANGER

Hazard Statements
 Causes skin irritation
 Causes serious eye irritation
 May cause an allergic skin reaction
 Suspected of causing cancer
 Suspected of damaging fertility or the unborn child
 May cause drowsiness or dizziness
 May cause damage to organs through prolonged or repeated exposure
 May be fatal if swallowed and enters airways
 Highly flammable liquid and vapor



Appearance Opaque **Physical state** Liquid **Odor** Solvent

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Contaminated work clothing should not be allowed out of the workplace
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Keep container tightly closed
 Ground/Bond container and receiving equipment
 Use explosion-proof electrical/ ventilating/ lighting/ equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Keep cool
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/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 advice/attention
 If skin irritation or rash occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
 Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

- May be harmful if swallowed
- Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains a known or suspected carcinogen

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
TOLUENE	108-88-3	30% - 40%	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm
2,2-BIS(ACRYLOXYMETHYL)BUTYL ACRYLATE	15625-89-5	20% - 30%	N/A	N/A
METHYL AMYL KETONE	110-43-0	10% - 20%	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³
BISPHENOL A - EPICHLOROHYDRIN	25068-38-6	5% - 10%	N/A	N/A
METHYL ISOBUTYL KETONE	108-10-1	5% - 10%	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³

4. FIRST AID MEASURES

First Aid Measures

General advice	Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.
Eye Contact	Immediately flush eyes with water for at least 15 minutes. Get medical attention. If easy to do, remove contact lenses. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Remove and wash contaminated clothing and gloves, including the inside, before re-use. If skin irritation persists, call a physician. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Consult a physician if necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Self-protection of the first aider	Remove all sources of ignition. Use personal protective equipment as required.
Most important symptoms and effects, both acute and delayed	
Most Important Symptoms and Effects	No information available.
Indication of any immediate medical attention and special treatment needed	
Notes to physician	May cause sensitization of susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Flammable.

Explosion Data

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists. Ventilate the area.

Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do

not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilation and lighting) equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use with local exhaust ventilation. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe vapor or mist. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks and flame. Keep containers tightly closed in a cool, well-ventilated place.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH	OSHA	NIOSH IDLH
TOLUENE 108-88-3	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³
METHYL AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m ³
METHYL ISOBUTYL KETONE 108-10-1	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³	IDLH: 500 ppm TWA: 50 ppm TWA: 205 mg/m ³ STEL: 75 ppm STEL: 300 mg/m ³

NIOSH IDLH: *Immediately Dangerous to Life or Health*

Exposure controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use personal protective equipment as required.

Skin and Body Protection Chemical resistant apron.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Appearance	Opaque
Odor	Solvent.	Odor Threshold	No data available
pH	No data available	Flash Point	45 °F / 7 °C
Decomposition temperature	No data available	Boiling Point	230 °F / 110 °C
Melting Point / Melting Range	No data available	Freezing Point	No data available
Vapor Pressure @20°C (kPa)	No data available	Partition coefficient:	No data available
Vapor Density	No data available	Density	No data available
Bulk density	No data available	Specific Gravity	0.94
Evaporation Rate	No data available	Water solubility	No data available
Dynamic viscosity	No data available	Weight per Gallon (lbs/gal):	7.85
		Flammability Limits in Air	
		Upper	4.03 %
		Lower	0.63 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	The product has not been tested
Inhalation	There is no data for this product.
Eye Contact	There is no data for this product.
Skin Contact	There is no data for this product.
Ingestion	There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
TOLUENE 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
METHYL AMYL KETONE 110-43-0	= 1600 mg/kg (Rat)	= 12.6 mL/kg (Rabbit)	2000 - 4000 ppm (Rat) 6 h
METHYL ISOBUTYL KETONE 108-10-1	= 2080 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	= 8.2 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
MUTAGENIC EFFECTS No information available.
Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
TOLUENE 108-88-3	N/A	Group 3	N/A	N/A
METHYL ISOBUTYL KETONE 108-10-1	A3	Group 2B	N/A	X

Legend:

- ACGIH (American Conference of Governmental Industrial Hygienists)
- A3 - Animal Carcinogen
- IARC (International Agency for Research on Cancer)
- Group 2B - Possibly Carcinogenic to Humans
- Group 3 - Not Classifiable as to Carcinogenicity in Humans
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- X - Present

Reproductive Toxicity No information available.
Specific target organ systemic toxicity (single exposure) No information available.
Specific target organ systemic toxicity (repeated exposure) No information available.
Chronic Toxicity Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. May cause adverse liver effects.
Target Organ Effects Central nervous system (CNS), Eyes, Kidney, Liver, Peripheral Nervous System (PNS), Respiratory system, Skin.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 3318 mg/kg
ATEmix (dermal) 8209 mg/kg
ATEmix (inhalation-dust/mist) 5.8 mg/l
Oral LD50 3811 mg/kg (rat) Estimated
Dermal LD50 9425 mg/kg (rat) Estimated

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
TOLUENE 108-88-3	12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 433: 96 h Pseudokirchneriella subcapitata mg/L EC50	11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 12.6: 96 h Pimephales promelas mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 5.8: 96 h Oncorhynchus mykiss	5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static 11.5: 48 h Daphnia magna mg/L EC50

		mg/L LC50 semi-static 54: 96 h Oryzias latipes mg/L LC50 static	
METHYL AMYL KETONE 110-43-0	N/A	126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	N/A
METHYL ISOBUTYL KETONE 108-10-1	400: 96 h Pseudokirchneriella subcapitata mg/L EC50	496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through	170: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
TOLUENE 108-88-3	2.7
METHYL AMYL KETONE 110-43-0	1.98
METHYL ISOBUTYL KETONE 108-10-1	1.19

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste treatment methods

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

US EPA Waste Number

D001

Chemical Name	RCRA - Basis for Listing	RCRA - D Series Wastes
TOLUENE 108-88-3	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151	N/A
METHYL ISOBUTYL KETONE 108-10-1	Included in waste stream: F039	N/A

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
TOLUENE 108-88-3	N/A	N/A	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	N/A

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
TOLUENE 108-88-3	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Special Provisions	149, B52, IB2, T4, TP1, TP8, TP28
Description	UN1263, Paint, 3, II, RQ
Emergency Response Guide Number	128

TDG

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Description	UN1263, Paint, 3, II

MEX

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Description	UN1263, Paint, 3, II

ICAO

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Special Provisions	A3, A72
Description	UN1263, Paint, 3, II

IATA

UN-No	UN1263
Hazard class	3
Packing Group	II
ERG Code	3L
Special Provisions	A3, A72, A192

IMDG/IMO

UN-No	UN1263
Hazard class	3
Packing Group	II
EmS-No	F-E, S-E
Special Provisions	163, 367

RID

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Description	UN1263, Paint, 3, II

ADR/RID

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Tunnel restriction code	(D/E)

Special Provisions 163, 640C, 650, 367
Description UN1263, Paint, 3, II, (D/E)
ADR/RID-Labels 3

ADN

Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Special Provisions 163, 640C, 650
Description UN1263, Paint, 3, II
Hazard Labels 3
Limited Quantity (LQ) 5 L
Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	SARA 313 - Threshold Values %
TOLUENE	108-88-3	1.0
METHYL ISOBUTYL KETONE	108-10-1	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CAA (Clean Air Act)

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:

Chemical Name	CAS No	Hazardous air pollutants (HAPs) content
TOLUENE	108-88-3	Present
METHYL ISOBUTYL KETONE	108-10-1	Present

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21

and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
TOLUENE	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ (reportable quantity)
TOLUENE	1000 lb 1 lb	N/A	RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
METHYL ISOBUTYL KETONE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ

State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	CAS No	California Proposition 65
TOLUENE	108-88-3	Developmental
METHYL ISOBUTYL KETONE	108-10-1	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
TOLUENE	X	X	X	X	X
METHYL AMYL KETONE	X	X	X	N/A	N/A
METHYL ISOBUTYL KETONE	X	X	X	X	N/A

International Regulations**Mexico - Grade**

Serious risk, Grade 3

Chemical Name	Carcinogenic Status	Exposure Limits
TOLUENE	N/A	Mexico: TWA 50 ppm Mexico: TWA 188 mg/m ³
METHYL AMYL KETONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 235 mg/m ³ Mexico: STEL 100 ppm Mexico: STEL 465 mg/m ³
METHYL ISOBUTYL KETONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 205 mg/m ³ Mexico: STEL 75 ppm Mexico: STEL 307 mg/m ³

16. OTHER INFORMATION**NFPA**

Health Hazard 2

Flammability 3

Instability 0

Physical and Chemical Hazards -

NFPA Rating



HMIS **Health Hazard 2 * Flammability 3 Physical Hazard 0 Personal protection X**

Chronic Hazard Star Legend

** Chronic Health Hazard*

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Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. SC-11GV

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