

Material Safety Data Sheet

EPIKURE™ 3382 Curing Agent

1. Product and company identification

Product name EPIKURE™ 3382 Curing Agent

MSDS Number 1503

Internal code K814H

Product Type Curing Agent

**Manufacturer, Importer,
Supplier** Hexion Specialty Chemicals, Inc.
P. O. Box 4500
Houston TX 77210

hazcom@hexion.com

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Telephone **For Emergency Medical Assistance**
Call Health & Safety Information Services, 1-866-303-6949

For Emergency Transportation Information

CHEMTREC US Domestic (800) 424-9300
CHEMTREC International (703) 527-3887
CANUTEC CA Domestic (613) 996-6666

For additional health and safety or regulatory information, call 1 888-4-Hexion.

2. Hazards identification

Form Liquid

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview DANGER !
HARMFUL IN CONTACT WITH SKIN OR IF SWALLOWED. CAUSES EYE AND SKIN BURNS. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION.

Potential acute health effects

Inhalation Can cause central nervous system (CNS) depression. Irritating to respiratory system. May cause sensitization by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion Harmful if swallowed. Can cause central nervous system (CNS) depression. May cause burns to mouth, throat and stomach.

Skin Corrosive to the skin. Causes burns. Harmful in contact with skin. May cause sensitization by skin contact.

Eyes Corrosive to eyes. Causes burns.

Potential chronic health effects

Chronic effects	Contains material that can cause target organ damage.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	Contains material which may cause heritable genetic effects.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.
Target organs	Contains material which causes damage to the following organs: lungs, upper respiratory tract, skin, eyes, central nervous system (CNS), Review Section 2 and 11 for any additional assessments.

Over-exposure signs/symptoms

Inhalation	Adverse symptoms may include the following: nausea or vomiting, respiratory tract irritation, coughing, headache, drowsiness/fatigue, dizziness/vertigo, wheezing and breathing difficulties, unconsciousness, asthma,
Ingestion	Adverse symptoms may include the following: stomach pains, nausea or vomiting, dizziness/vertigo, drowsiness/fatigue, headache, unconsciousness,
Skin	Adverse symptoms may include the following: pain or irritation, redness, blistering may occur
Eyes	Adverse symptoms may include the following: pain, watering, redness,
Medical conditions aggravated by over-exposure	Pre-existing respiratory and skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See section 11 for more detailed information on health effects and symptoms.

3. Composition/Information on ingredients

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>
Benzyl Alcohol	100-51-6	30.0 - 50.0
Isophorone Diamine	2855-13-2	30.0 - 50.0
Alkylphenol (Proprietary)	**	
Amine-Epoxy Resin Adduct (Proprietary)	**	

** Any applicable Canadian trade secret numbers will be listed in Section 15.

4. First aid measures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician. Get medical attention immediately.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. 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. Get medical attention immediately.

Inhalation	Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. 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. Get medical attention immediately. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
Ingestion	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Protection of first aid personnel	No action shall be taken involving any personal risk or without suitable training. 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. If it is suspected that dust, vapor, mist or gas are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
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.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Flammability of the product	In a fire or if heated, a pressure increase will occur and the container may burst.
<u>Extinguishing media</u>	
Suitable	Use an extinguishing agent suitable for the surrounding fire.
Not suitable	Water or fog may cause frothing which can be violent, especially if sprayed into containers of hot or burning liquid.
Special exposure hazards	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.
Hazardous combustion products	Decomposition products may include the following materials: carbon oxides, nitrogen oxides,
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.

6. Accidental release measures

Personal precautions	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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). Do not breathe dust, vapor, mist or gas.
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).
Large spill	Stop leak if without risk. Move containers from spill area. 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.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling	Put on appropriate personal protective equipment (see section 8). 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. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Do not breathe dust, vapor, mist or gas.
Storage	Store in accordance with local regulations. 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. 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.

8. Exposure controls/personal protection

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
Benzyl Alcohol	

AIHA WEEL 8-hr TWA

10 ppm

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Engineering measures	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.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hands	<p>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.</p> <p>Recommended:</p> <ul style="list-style-type: none">- Neoprene gloves- Nitrile rubber gloves- gauntlet type
Eyes	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 or dusts.
Skin	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.
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.

9. Physical and chemical properties

Form	Liquid
Flash point	Greater than 93.4 °C(200.1 °F) Setaflash Closed Cup ASTM D 3828
Boiling point	205 - 248 °C(401 - 478 °F)
Relative density	1.01

Vapor pressure	Less than 0.27 mbar @ 20 °C(68 °F)
Solubility	Partial
Evaporation rate	Less than 1 (n-Butyl acetate=1)
Vapor density	Greater than 1

10. Stability and reactivity

Stability	The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	Avoid exposure - obtain special instructions before use. Keep away from heat, sparks, flame and other ignition sources.
Materials to avoid	Reactive or incompatible with the following materials: strong oxidizing agents, acids,
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Acute toxicity

Ingredient name

Benzyl	LD50 Oral	Mouse	1,360 mg/kg
	LD50 Oral	Guinea pig	2,500 mg/kg
	LD50 Oral	Rat	1,230 mg/kg
	LD50 Dermal	Rabbit	2,000 mg/kg
Isophorone	LD50 Oral	Rat	1,030 mg/kg
Alkylphenol	LD50 Oral	Mammal	1,500 mg/kg
	LD50 Oral	Mouse	1,030 mg/kg
	LD50 Dermal	Mammal	1,580 mg/kg

Other Toxicological Information

Carcinogenicity

Classification

Ingredient name

Benzyl Alcohol	ACGIH	Not classified
	IARC	Not classified
	NTP	Not listed
	OSHA	Not regulated
Isophorone Diamine	ACGIH	Not classified
	IARC	Not classified
	NTP	Not listed
	OSHA	Not regulated
Alkylphenol (Proprietary)	ACGIH	Not classified
	IARC	Not classified
	NTP	Not listed
	OSHA	Not regulated
Amine-Epoxy Resin Adduct (Proprietary)	ACGIH	Not classified
	IARC	Not classified
	NTP	Not listed

12. Ecological information

Environmental effects

No known significant effects or critical hazards.

Aquatic ecotoxicity

Ingredient name

Benzyl	Fresh water	Acute LC50 10 mg/l/96 h	Bluegill
	Fresh water	Acute LC50 460 mg/l/96 h	Fathead minnow
Alkylphenol	Fresh water	Acute LC50 5.14 mg/l/4 d	Fathead minnow
	Fresh water	Acute LC50 6.9 mg/l/4 d	common carp

Other adverse effects

No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transportation

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
CFR	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONE DIAMINE)	Class 8 III	
TDG	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONE DIAMINE)	Class 8 III	
IMO/IMDG	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. contains (ISOPHORONE DIAMINE)	Class 8 III	
IATA (Cargo)	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. contains (ISOPHORONE DIAMINE)	Class 8 III	

*PG : Packing group

15. Regulatory information

US regulations

HCS Classification Corrosive material, Sensitizing material, Target organ effects

U.S. Federal regulations

SARA 311/312 Classification Immediate (acute) health hazard, Delayed (chronic) health hazard

SARA 313 - Supplier Notification

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

None required.

SARA 302 Extremely Hazardous Substances None required.

State regulations

Massachusetts RTK Substances The following components are listed: Benzyl Alcohol,

New Jersey RTK Hazardous Substances The following components are listed: Benzyl Alcohol, Isophorone Diamine, Alkylphenol (Proprietary),

Pennsylvania RTK Hazardous Substances The following components are listed: Benzyl Alcohol,

California Prop. 65: None required.

Canada

WHMIS (Canada)

Class D-1B: Material causing immediate and serious toxic effects (Toxic).

Class D-2A: Material causing other toxic effects (Very toxic).

Class D-2B: Material causing other toxic effects (Toxic).

Class E: Corrosive material

Canadian lists

Canadian NPRI: None required.

International regulations

Chemical inventories

Europe inventory All components are listed or exempted.

Australia inventory (AICS) All components are listed or exempted.

China inventory (IECSC) All components are listed or exempted.

Japan inventory (ENCS) All components are listed or exempted.

Japan inventory (ISHL) Not determined.

Korea inventory (KECI) All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC) Not determined.

Philippines inventory (PICCS) All components are listed or exempted.

Canada inventory All components are listed or exempted.

United States inventory (TSCA 8b) All components are listed or exempted.

16. Other information

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

Health : 3

Flammability: 1

Physical hazards : 0

Chronic : *

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 are not required on MSDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

**Prepared by
Date of issue**

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Notice to reader

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