

U-571 Part B

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: U-571 Part B
Common Name: Cycloaliphatic Amine Epoxy Curing Agent
SDS Number: I31
Revision Date: 6/8/2015
Version: 1
Supplier Details: Coatings For Industry, Inc.
 319 Township Line Road
 Souderton, PA 18964
Emergency Contact: Infotrac
Contact: USA: 1-800-535-5053 / International :352-323-3500
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2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Serious Eye Damage/Eye Irritation, 1
 Health, Skin corrosion/irritation, 1 B
 Health, Respiratory or skin sensitization, 1 Respiratory
 Environmental, Hazards to the aquatic environment - Acute, 2
 Health, Respiratory or skin sensitization, 1 Skin
 Health, Reproductive toxicity, 2
 Health, Skin corrosion/irritation, 2
 Health, Acute toxicity, 4 Dermal
 Health, Acute toxicity, 4 Inhalation
 Health, Acute toxicity, 4 Oral
 Health, Acute toxicity, 5 Oral
 Environmental, Hazards to the aquatic environment - Acute, 3

GHS Label elements, including precautionary statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:



GHS Hazard Statements:

H318 - Causes serious eye damage
 H314 - Causes severe skin burns and eye damage
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H401 - Toxic to aquatic life
 H317 - May cause an allergic skin reaction
 H361 - Suspected of damaging fertility or the unborn child
 H315 - Causes skin irritation
 H312 - Harmful in contact with skin
 H332 - Harmful if inhaled
 H302 - Harmful if swallowed
 H303 - May be harmful if swallowed
 H402 - Harmful to aquatic life

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GHS Precautionary Statements:

- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 - Wash hands thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P302+352 - IF ON SKIN: Wash with soap and water.
- P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
- P330 - Rinse mouth.
- P332+313 - If skin irritation occurs: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.

Hazards not otherwise classified (HNOC) or not covered by GHS

- Route of Entry:** Inhalation, skin and eye contact.
- Target Organs:** Prolonged or repeated exposure may cause injury or illness of the respiratory system (lungs).
- Inhalation:** Inhalation of vapor or aerosol may cause severe irritation to the respiratory tract (nose, throat, and lungs). Inhalation of vapors or aerosol may cause central nervous system depression with symptoms that include headache, nausea, impaired judgment, confusion, blurred vision, fatigue, loss of coordination, or dizziness.
- Skin Contact:** Contact may cause skin burning. Contact may cause skin sensitization, an allergic reaction which becomes evident on re-exposure to this material. Skin absorption of harmful amounts possible from excessive exposure only.
- Eye Contact:** Corrosive. Direct contact with eyes will cause severe burns and may cause permanent damage, including blindness. High vapor concentrations may be irritating.

3	COMPOSITION/INFORMATION ON INGREDIENTS
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Ingredients:

Cas#	%	Chemical Name
110-85-0	1-2%	Piperazine
100-51-6	25-40%	Benzyl alcohol
2855-13-2	60-75%	cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-

4	FIRST AID MEASURES
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- Inhalation:** If affected, remove to fresh air. Keep warm and quiet. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. GET IMMEDIATE MEDICAL ATTENTION.
- Skin Contact:** Wash the affected area thoroughly with plenty of water and soap. Remove contaminated clothing. Wash contaminated clothing before reuse.
- Eye Contact:** Immediately flush eyes with plenty of clean water for an extended time, not less than five (5) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion.
- Ingestion:** DO NOT INDUCE VOMITING. CORROSIVE HAZARD. This material may cause further damage if vomiting is induced. Immediately give the victim one or two glasses of water or milk to drink. Never give anything by mouth to an unconscious person. GET IMMEDIATE MEDICAL ATTENTION.

If irritation or other symptoms (as noted above) occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

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5 FIRE FIGHTING MEASURES

Flash Point: Greater than 200F

Flash Point Method: TCC

Hazardous gases/vapors produced in fire are carbon monoxide, carbon dioxide, and irritating or toxic vapors.

Extinguishing Media:

Water Fog, foam, dry chemical, CO2.

Fire Fighting Instructions:

Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by fire fighters. During a fire irritating, highly toxic gases may be generated by thermal decomposition or combustion. (See Section VIII) Emits toxic fumes under fire conditions. Isolate from heat, electrical equipment, sparks, and open flame. Closed container may explode when exposed to extreme heat. Wear neoprene gloves when handling refuse from fire.

6 ACCIDENTAL RELEASE MEASURES

Containment Techniques

Contain spill.

Clean-Up Techniques

Wear proper personal protective clothing and equipment.

Do not flush liquid into public sewer, water systems or surface waters.

Soak up large spill residue and small spills with an inert absorbent. Place into labeled, closed container; store in safe location to await disposal. Wash the spill area with soap and water. Dispose of in accordance with national and local regulations.

Change contaminated clothing and launder before reuse.

CAUTION: Spilled liquid and dried film may be slippery. Use care to avoid falls.

7 HANDLING AND STORAGE

Handling Precautions:

Avoid eye contact.

Avoid repeated or prolonged skin contact.

Avoid inhalation of aerosol, mist, spray, fume or vapor.

Avoid drinking, tasting, swallowing or ingesting this product.

Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities.

Provide eyewash fountains and safety showers in the work area.

Use under well ventilated conditions.

Storage Requirements:

Do not store in open, unlabeled or mislabeled containers.

Store in cool, well ventilated area.

Do not allow product to freeze.

Do not puncture or stack drums.

Keep container closed when not in use.

Do not reuse empty container without commercial cleaning or reconditioning.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Ventilation guidelines/techniques may be found in publications such as Industrial Ventilation: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH, 45240 1634, USA.

Personal Protective Equipment:

Eye/Face Protection:

Wear eye protection (chemical goggles or goggles and an 8-inch (minimum) full face shield where spilling and splashing may occur).

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Skin Protection:

Wear chemical resistant (impervious) gloves. If splashing is likely, wear impervious clothing and boots to prevent skin contact.

Respiratory Protection:

Wear a respirator approved by NIOSH/MSHA (e.g., an organic vapor respirator, a full face air purifying respirator for organic vapors, or a self contained breathing apparatus) whenever exposure to aerosol, mist, spray, fume or vapor exceed the exposure limit(s) of any chemical substance listed in this MSDS. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR).

Components with workplace control parameters:

Benzyl alcohol (100-51-6) [25-40%]

OSHA/PEL TWA 10 ppm USA. Workplace Environmental
Exposure Levels (WEEL)

9	PHYSICAL AND CHEMICAL PROPERTIES
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Appearance:	Clear / slight yellow tint	Odor:	Mild amine
Physical State:	Liquid	Solubility:	Negligible in water.
Spec Grav./Density:	0.95-1.05	Percent Volatile:	0
		VOC:	0

10	STABILITY AND REACTIVITY
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Chemical Stability:	This product is stable.
Conditions to Avoid:	Contamination by those materials referred to under incompatibility.
Materials to Avoid:	Strong oxidizers, acids, and epoxy resins under uncontrolled conditions.
Hazardous Decomposition:	Decomposition or combustion may generate irritating vapors, CO, CO ₂ , and volatile amines.
Hazardous Polymerization:	Hazardous polymerization will not occur.

11	TOXICOLOGICAL INFORMATION
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Piperazine (110-85-0) [1-2%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 2,600 mg/kg
 Inhalation LC50 LC0 Inhalation - rat - 4 h - 0.8 mg/l
 Dermal LD50 LD50 Dermal - rabbit - 8,300 mg/kg
 Other information on acute toxicity no data available
 Skin corrosion/irritatio Skin - rabbit - Causes burns
 Serious eye damage/eye irritatio Eyes - rabbit - Severe eye irritation - 24
 Respiratory or skin sensitisatio Maximisation Test - guinea pig - May cause sensitisation by skin contact
 May cause sensitisation by inhalation
 Germ cell mutagenic
 Carcinogenic

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IARC: No component of this product present at levels greater than or equal to 0.1% is identified a probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by OSHA.
Reproductive toxicit

Teratogenicity

Specific target organ toxicity - single exposure (Globally Harmonized System):
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System):
no data available

Aspiration hazard

Potential health effect

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. Causes skin burns. Eyes Causes eye burns.

Signs and Symptoms of Exposure Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough Shortness of breath, Headache, Nause

Synergistic effect

Additional Informatio RTECS: TK7800000

Benzyl alcohol (100-51-6) [25-40%]

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - 1,230 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Excitement. Behavioral:Coma.
Inhalation: no data available

LD50 Dermal - rabbit - 2,000 mg/kg

Skin corrosion/irritation: Skin - rabbit Result: Irritating to skin. - 24 h

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

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Additional Information:

RTECS: DN3150000

Central nervous system depression
Liver - Irregularities - Based on Human Evidence

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (2855-13-2) [60-75%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 1,030 mg/kg

Inhalation LC50 no data available

Dermal LD50 Other information on acute toxicity

Skin corrosion/irritation: Skin - rabbit - Skin irritation

Serious eye damage/eye irritation: Eyes - rabbit - Corrosive to eyes

Respiratory or skin sensitisation: May cause allergic skin reaction.

Causes sensitisation.

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity

Specific target organ toxicity - single exposure (Globally Harmonized System):
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System):
no data available

Aspiration hazard

Potential health effects: Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. Causes skin burns. Eyes Causes eye burns.

Synergistic effects: no data available

Additional Information RTECS: GV5020833

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ECOLOGICAL INFORMATION

Piperazine (110-85-0) [1-2%]

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Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Poecilia reticulata* (guppy) - > 1,800 mg/l - 96.0 h.

Toxicity to daphnia EC50 - *Daphnia magna* (Water flea) - 21 mg/l - 48 h.
and other aquatic invertebrates

Toxicity to algae EC50 - *Pseudokirchneriella subcapitata* (green algae) - > 1,000 mg/l - 72 h.

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

Benzyl alcohol (100-51-6) [25-40%]

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Lepomis macrochirus* (Bluegill) - 10 mg/l - 96 h.

Toxicity to daphnia and EC50 - *Daphnia magna* (Water flea) - 55 mg/l - 24 h.
other aquatic invertebrates

Persistence and degradability: Biodegradability Biotic/Aerobic - Exposure time 28 d Result: 92 - 96 % - Readily biodegradable.

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (2855-13-2) [60-75%]

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Leuciscus idus* (Golden orfe) - 110 mg/l - 96.0 h.

Toxicity to daphnia EC50 - *Daphnia magna* (Water flea) - 17.4 mg/l - 48 h.
and other aquatic invertebrates

Toxicity to algae EC50 - *Desmodesmus subspicatus* (green algae) - 37 mg/l - 72 h.

Persistence and degradability: no data available

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Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

13	DISPOSAL CONSIDERATIONS
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14	TRANSPORT INFORMATION
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UN3066, Paint or Paint related material, 8, PGIII

15	REGULATORY INFORMATION
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Component (CAS#) [%] - CODES

Piperazine (110-85-0) [1-2%] HAP, MASS, PA, TSCA

Benzyl alcohol (100-51-6) [25-40%] HAP, MASS, PA, TSCA

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (2855-13-2) [60-75%] TSCA

SARA Title III section 313

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

Component	CAS#	Amount
None		

SARA Title III Section 312 Hazard Category (40 CFR 311/312)

Acute Health:	Yes	Release of Pressure:	No
Chronic Health:	No	Reactive:	No
Fire:	No		

California Proposition 65

"Substances known to the state of California to cause cancer, birth defects or other reproductive harm": None known*to be present or none in reportable amounts for occupational exposure as per OSHA's approval of the California Hazard Communication Standard, Federal Register, page 31159 ff, 6 June 1997.

Canadian DSL: All components in this product are on the Canadian Domestic Substances List (DSL) or are exempt from listing.

Canadian Ingredient Disclosure List (WHMIS) :. Not applicable. Canadian WHMIS: This product is not controlled under the Canadian Hazardous Materials Information System (WHMIS).

Regulatory CODE Descriptions

HAP = Hazardous Air Pollutants
MASS = MA Massachusetts Hazardous Substances List
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act

16	OTHER INFORMATION
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