2-TON CLEAR EPOXY HARDENER

This product appears in the following stock number(s):
14260  14310  14360  DA330

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

   Tradename: 2-TON CLEAR EPOXY HARDENER

   General use: The following health hazard data pertain to the hardener only. When fully cured, the mixed product is non-hazardous.

   Chemical family: Polyamine adduct

MANUFACTURER
ITW Devcon
30 Endicott St.
Danvers, Massachusetts 01923

EMERGENCY INFORMATION
Emergency telephone number
(CHEMTREC): (800) 424-9300
Other Calls: (508) 777-1100

2. COMPOSITION/INFORMATION ON INGREDIENTS

   HAZARDOUS CONSTITUENTS

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Abbr.</th>
<th>CAS No.</th>
<th>Weight percent</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aminoethylpiperazine</td>
<td>AEP</td>
<td>140318</td>
<td>&lt;50</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td></td>
<td>25154523</td>
<td>&gt;30</td>
<td>n/e</td>
<td>n/e</td>
<td>n/e</td>
</tr>
</tbody>
</table>

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance, form, odor: Amber liquid with ammonia-like, fishy odor.


Potential health effects

Primary routes of exposure: ☑ Skin contact ☐ Skin absorption ☑ Eye contact ☑ Inhalation ☐ Ingestion

Symptoms of acute overexposure:

Skin: Severe irritation or burns, necrosis and permanent injury.
Eyes: Severe irritation or burns. May cause lacrimation, conjunctivitis, corneal damage and may cause permanent injury.
Inhalation:
If the hardener is strongly heated or atomized, the vapor or mist can cause severe irritation of the respiratory tract. Coughing and chest pain may result.

Ingestion:
Causes severe damage to mucous membranes if swallowed. May cause malaise, headache, discomfort, bleeding and vomiting of blood.

Effects of chronic overexposure:
Prolonged or repeated overexposure by skin contact or inhalation may cause skin sensitization, with itching, swelling and rashes upon further exposure. Adverse eye effects may include conjunctivitis or corneal damage.

Carcinogenicity — OSHA regulated: No    ACGIH: No    National Toxicology Program: No
International Agency for Research on Cancer: No
Cancer-suspect constituent(s): None

Medical conditions which may be aggravated by exposure:
Asthma, eczema, or skin disorders and allergies, eye disease.

Other effects:
None known.

4. FIRST AID MEASURES

First aid for eyes:
Flush with clear water holding eyelids open for at least 15 minutes. Get immediate medical attention.

First aid for skin:
Remove contaminated clothing and shoes. Wipe off hardener and wash thoroughly with mild soap and water; see a doctor if redness or swelling occurs.

First aid for inhalation:
Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention if symptoms persist.

First aid for ingestion:
Do NOT induce vomiting. If patient is conscious, dilute by giving milk or water. Get immediate medical attention.

Note to physician:
Highly injurious to all tissues, similar to that of ammonia or ammonia gas. Chemical pneumonitis, pulmonary edema, laryngeal edema and delayed scarring of the airway or other affected tissues may occur following exposure. Give supportive treatment similar to thermal burns.

5. FIRE FIGHTING MEASURES

General fire and explosion characteristics:
Combustible liquid, class III B

Extinguishing media:
☐ Water    ☒ Carbon dioxide    ☐ Dry chemical    ☐ Foam    ☒ Alcohol foam

Flash Point (°F): 275    Method: PMCC
Explosive limits in air (percent) — Lower: n/d    Upper: n/d

Special firefighting procedures:
Firefighters should wear self-contained breathing apparatus and protective clothing (butyl rubber). Water spray may be useful in cooling containers and dispersing vapors.

Unusual fire and explosion hazards:
A sudden reaction and fire may result when mixed with an oxidizing agent.
6. ACCIDENTAL RELEASE MEASURES

- Spill control:
  Prevent skin and eye contact. Ventilate area. Eliminate ignition sources.

- Containment:
  Construct a dike to prevent spreading. Collect run-off water for proper disposal.

- Cleanup:
  Using butyl rubber protective clothing and self-contained breathing apparatus, neutralize and reduce vapors with sodium bisulfate. Absorb spillage on inert material and discard in closed, nonporous containers.

- Special procedures:
  Prevent product from entering streams or drinking water supplies (notify local health authorities and other appropriate agencies if such contamination occurs).

7. HANDLING AND STORAGE

- Handling precautions:
  - Avoid skin and eye contact with this hardener.
  - Keep hands away from eyes when handling material or before washing after use.
  - Wash thoroughly after using, particularly before eating or smoking.
  - Launder contaminated clothing before re-use; discard contaminated leather articles.
  - Prolonged or repeated overexposure can cause sensitization and allergic response. Those so affected should consult a physician, and avoid further exposure to this material if exposure is confirmed.
  - Do not use sodium nitrite or other nitrosating agents (nitrous acid, nitrites or nitrous oxide atmospheres) with product, cancer-causing nitroamines could be formed.

- Storage:
  - Store closed in a cool, dry place away from oxidizers, heat or flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls
  - Ventilation:
    Local exhaust is recommended for repeated or prolonged use, especially in confined areas. General mechanical ventilation is usually sufficient for occasional use.

  - Other engineering controls:
    Have emergency showers and eye wash stations in area.

- Personal protective equipment
  - Eye and face protection:
    Safety glasses with side shields or splash proof goggles.

  - Skin protection:
    Chemical resistant rubber gloves (nitrile) and other protective clothing as required to prevent skin contact.

  - Respiratory protection:
    None needed in normal use with proper ventilation. In poorly ventilated areas, use NIOSH-approved organic vapor masks.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific gravity:</td>
<td>0.97</td>
</tr>
<tr>
<td>Melting point (°F):</td>
<td>n/d</td>
</tr>
<tr>
<td>Vapor pressure (mmHg):</td>
<td>&lt;1 mm Hg at 77 °F</td>
</tr>
<tr>
<td>VOC (grams/liter):</td>
<td>0</td>
</tr>
<tr>
<td>Percent volatile by volume:</td>
<td>0</td>
</tr>
<tr>
<td>Percent solids by weight:</td>
<td>100</td>
</tr>
<tr>
<td>Boiling point (°F):</td>
<td>&gt;430</td>
</tr>
<tr>
<td>Vapor density (air = 1):</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Evaporation rate (butyl acetate = 1):</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>Completely</td>
</tr>
<tr>
<td>pH (5% solution or slurry in water):</td>
<td>10.5-11.5</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid:
- Extreme heat or open flame

Incompatible materials:
- Strong oxidizing agents (i.e. perchlorates, nitrates), acids (i.e. chromic acid) and chlorinated organic compounds.

Hazardous products of decomposition:
- Acid and toxic smoke, organic amines, carbon and nitrogen oxides, nitriles, cyanic acid, isocyanates, cyanogens, nitrosamines, amides, carbarnates. Ammonia when heated.

Conditions under which hazardous polymerization may occur:
- Heat is generated when mixed with epoxy resin. Use caution when mixing large quantities.

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral effects</td>
<td>LD50 (rat): &gt; 2000 mg/kg (estimate)</td>
</tr>
<tr>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>Acute dermal effects</td>
<td>LD50 (rabbit): &gt; 2000 mg/kg (estimate)</td>
</tr>
<tr>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>Acute inhalation effects</td>
<td>LC50 (rat): No data</td>
</tr>
<tr>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>Eye irritation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Subchronic effects</td>
<td>Not available.</td>
</tr>
<tr>
<td>Carcinogenicity, teratogenicity, and mutagenicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other chronic effects</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Exposure: hours.
Toxicological information on hazardous chemical constituents of this product:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 4hr, (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aminoethyipiperazine</td>
<td>2140 mg/kg</td>
<td>900 mg/kg</td>
<td>n/d</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td>1620 mg/kg</td>
<td>2140 mg/kg</td>
<td>&gt;1 mg/L</td>
</tr>
</tbody>
</table>

'N/d' = 'not determined'

12 ECOLOGICAL INFORMATION

Ecotoxicity:
Not available.

Mobility and persistence:
Not available.

Environmental fate:
Not available.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Waste management recommendations:
Remove to a waste disposal facility operating in compliance with state and local regulations. Incineration is the preferred method of disposal.

14. TRANSPORT INFORMATION

Proper shipping name: CAUSTIC ALKALI LIQUIDS, N.O.S.*
Technical name: N-AMINOETHYPIPERAZINE, NONYLPHENOL
Hazard class: 8
UN number: 1719
Packing group: III
Emergency Response Guide no.: 60
IMDG page number: 8136
Other: Marine Pollutant (nonylphenol)
15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA
All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:
None

Regulatory status of hazardous chemical constituents of this product:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Extremely Hazardous*</th>
<th>Toxic Chemical**</th>
<th>CERCLA RQ (lbs)</th>
<th>TSCA 12B Export Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aminoethylpiperazine</td>
<td>No</td>
<td>No</td>
<td>None</td>
<td>Not required</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td>No</td>
<td>No</td>
<td>None</td>
<td>Not required</td>
</tr>
</tbody>
</table>

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard — Delayed health hazard -

Canadian regulations

WHMIS hazard class(es) : E
All components of this product are on the Domestic Substances List.

16. OTHER INFORMATION

Hazardous Materials Information System (HMIS) ratings:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3*</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

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