



Revision Number: 010.1

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1. PRODUCT AND COMPANY IDENTIFICATION

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|-------------------------------|-----------------------------------|---------------------|---------------|
| Product name: | Hysol 11C EPK HARD | IDH number: | 702166 |
| Product type: | Epoxy Hardener | Item number: | 83186_HD3477 |
| | | Region: | United States |
| Company address: | Contact information: | | |
| Henkel Corporation | Telephone: 860.571.5100 | | |
| One Henkel Way | Emergency telephone: 860.571.5100 | | |
| Rocky Hill, Connecticut 06067 | Internet: www.henkelna.com | | |

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

| | | | |
|------------------------|--------------------|-----------------------------|--------------------|
| Physical state: | Viscous, Liquid | HEALTH: | *3 |
| Color: | Tan | FLAMMABILITY: | 1 |
| Odor: | Strong, Ammoniacal | PHYSICAL HAZARD: | 0 |
| | | Personal Protection: | See MSDS Section 8 |

DANGER: CAUSES EYE AND SKIN BURNS.
MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
MAY BE HARMFUL IF SWALLOWED.

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects

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|----------------------|---|
| Inhalation: | Allergic respiratory reaction. May cause respiratory tract irritation. May cause irritation to nose and throat. |
| Skin contact: | May cause skin burns. Allergic skin reaction. Rash. Redness. |
| Eye contact: | Burns. Severe eye irritation. Redness. Tissue damage. |
| Ingestion: | May be harmful if swallowed. May cause burns of mouth and throat if swallowed. |

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders. Skin allergies. Respiratory allergies.

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

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous components | CAS NUMBER | % |
|---|------------|---------|
| Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct | 68610-56-0 | 10 - 30 |
| Talc | 14807-96-6 | 10 - 30 |
| Quartz (SiO2) | 14808-60-7 | 10 - 30 |
| Diethylenetriamine | 111-40-0 | 10 - 30 |
| 4,4'-Isopropylidenediphenol | 80-05-7 | 1 - 5 |
| 2-(3,4-Epoxy-cyclohexyl)ethyltrimethoxysilane | 3388-04-3 | 0.1 - 1 |

4. FIRST AID MEASURES

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| Inhalation: | Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| Skin contact: | Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse. |
| Eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| Ingestion: | Get immediate medical attention. Keep individual calm. DO NOT induce vomiting unless directed to do so by medical personnel. |

5. FIRE FIGHTING MEASURES

| | |
|--|--|
| Flash point: | > 101.6 °C (> 214.88 °F) |
| Autoignition temperature: | Not available |
| Flammable/Explosive limits - lower: | Not available |
| Flammable/Explosive limits - upper: | Not available |
| Extinguishing media: | Water spray (fog), foam, dry chemical or carbon dioxide. |
| Special firefighting procedures: | Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. |
| Unusual fire or explosion hazards: | In case of fire, keep containers cool with water spray. |
| Hazardous combustion products: | Oxides of carbon. Oxides of nitrogen. Irritating organic fragments. |

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

| | |
|-----------------------------------|--|
| Environmental precautions: | Do not allow product to enter sewer or waterways. |
| Clean-up methods: | Remove all sources of ignition. Immediately contact emergency personnel. Scrape up as much material as possible. Clean residue with soap and water. Store in a partly filled, closed container until disposal. |

7. HANDLING AND STORAGE

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|------------------|--|
| Handling: | Keep away from heat, spark and flame. Do not breathe gas/fumes/vapor/spray. Keep container closed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. |
| Storage: | Store in original container until ready to use. Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. |

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

| Hazardous components | ACGIH TLV | OSHA PEL | AIHA WEEL | OTHER |
|---|---|--|-----------|--------|
| Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct | None | None | None | None |
| Talc | 2 mg/m3 TWA Respirable fraction. | 20 MPPCF TWA 2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust. | None | 50 ppm |
| Quartz (SiO2) | 0.025 mg/m3 TWA Respirable fraction. | 2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust. | None | None |
| Diethylenetriamine | 1 ppm TWA (SKIN) | None | None | None |
| 4,4'-Isopropylidenediphenol | None | None | None | None |
| 2-(3,4-Epoxy-cyclohexyl)ethyltrimethoxysilane | None | None | None | None |

Engineering controls:

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection:

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection:

Safety goggles or safety glasses with side shields.

Skin protection:

Chemical resistant, impermeable gloves. Butyl rubber gloves. Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| Physical state: | Viscous, Liquid |
| Color: | Tan |
| Odor: | Strong, Ammoniacal |
| Odor threshold: | Not available |
| pH: | Not applicable |
| Vapor pressure: | < 1 mm hg (20 °C (68°F)) |
| Boiling point/range: | 207 °C (404.6 °F) (1,013 hPa) |
| Melting point/ range: | Not available |
| Specific gravity: | 1.65 |
| Vapor density: | 3.5 |
| Flash point: | > 101.6 °C (> 214.88 °F) |
| Flammable/Explosive limits - lower: | Not available |
| Flammable/Explosive limits - upper: | Not available |
| Autoignition temperature: | Not available |
| Evaporation rate: | Not available |
| Solubility in water: | Partially miscible |
| Partition coefficient (n-octanol/water): | Not available |
| VOC content: | < 0.1 % (value for resin and hardener together) |

10. STABILITY AND REACTIVITY

| | |
|--|--|
| Stability: | Stable |
| Hazardous reactions: | Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers. |
| Hazardous decomposition products: | None |
| Incompatible materials: | Strong bases. Strong acids. Strong oxidizing agents. Amines. Water. |
| Conditions to avoid: | Avoid temperatures above 38°C (100°F). Excessive heat. Store away from incompatible materials. Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Failure to observe these precautions may result in excessive heat build-up causing an exotherm. |

11. TOXICOLOGICAL INFORMATION

| Hazardous components | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|---|-------------------|-----------------|--|
| Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct | No | No | No |
| Talc | No | No | No |
| Quartz (SiO ₂) | Known carcinogen. | Group 1 | No |
| Diethylenetriamine | No | No | No |
| 4,4'-Isopropylidenediphenol | No | No | No |
| 2-(3,4-Epoxy-cyclohexyl)ethyltrimethoxysilane | No | No | No |

| Hazardous components | Health Effects/Target Organs |
|---|---|
| Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct | No Records |
| Talc | Irritant, Lung, Some evidence of carcinogenicity |
| Quartz (SiO ₂) | Immune system, Lung, Some evidence of carcinogenicity |
| Diethylenetriamine | Allergen, Irritant, Eyes |
| 4,4'-Isopropylidenediphenol | Allergen, Blood, Irritant, Kidney, Reproductive, Spleen |
| 2-(3,4-Epoxy-cyclohexyl)ethyltrimethoxysilane | Irritant, Allergen |

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The shipping classifications in this sections are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

U.S. Department of Transportation Ground (49 CFR)

| | |
|----------------------------------|---|
| Proper shipping name: | Diethylenetriamine (Up to 1 L max per inner/primary package when shipped as originally packaged only) |
| Hazard class or division: | 8 |
| Identification number: | UN 2079 |
| Packing group: | II |
| Exceptions: | Consumer Commodity, ORM-D, (Not more than 1 L) |

International Air Transportation (ICAO/IATA)

Proper shipping name: Diethylenetriamine (Up to 1 L max per inner/primary package when shipped as originally packaged only)
Hazard class or division: 8
Identification number: UN 2079
Packing group: II

Water Transportation (IMO/IMDG)

Proper shipping name: DIETHYLENETRIAMINE (Up to 1 L max per inner/primary package when shipped as originally packaged only)
Hazard class or division: 8
Identification number: UN 2079
Packing group: II

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification: None above reporting de minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA 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 (40 CFR 372). 4,4'-Isopropylidenediphenol (CAS# 80-05-7).
California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class: D.2.A, D.2.B, E

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

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