Safety Data Sheet



Revision Number: 006.0

Issue date: 08/13/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Product type: Epoxy Hardener Restriction of Use: None identified Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

HYSOL 9430 1 QT KT HARD

IDH number: 702140 Item number: 83114_AB9231 Region: United States Contact information: Telephone: (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

| | EMERGENCY OVERVIEW | |
|---------|---|--|
| | | |
| DANGER: | CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. | |
| DANGEN. | CAUSES SEVERE SKIN DURING AND ETE DAMAGE. | |
| | | |
| | MAY CAUSE AN ALLERGIC SKIN REACTION. | |
| | | |
| | MAY CAUSE RESPIRATORY IRRITATION. | |
| | MAT GAUSE RESPIRATOR FIRRITATION. | |
| | | |

| HAZARD CLASS | HAZARD CATEGORY |
|--|-----------------|
| SKIN CORROSION | 1B |
| SERIOUS EYE DAMAGE | 1 |
| SKIN SENSITIZATION | 1 |
| SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE | 3 |



Precautionary Statements

| Prevention: | Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eve protection, and face protection. |
|-------------|---|
| Response: | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Immediately call a poison control center or physician. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. |
| Storage: | Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| Disposal: | Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations. |

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Component(s) | CAS Number | Percentage* | |
|--|-------------|-------------|--|
| Tetraethylene pentamine | 112-57-2 | 30 - 60 | |
| Substituted piperazine | Proprietary | 10 - 30 | |
| Aluminium hydroxide | 21645-51-2 | 10 - 30 | |
| Silica, amorphous, fumed, crystal-free | 112945-52-5 | 5 - 10 | |
| Polyamine | Proprietary | 1 - 5 | |
| Titanium dioxide | 13463-67-7 | 0.1 - 1 | |
| Amine adduct | Proprietary | 0.1 - 1 | |
| Triethylenetetramine | 112-24-3 | 0.1 - 1 | |

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

| 4 | . FIRST AID MEASURES |
|------------------------------------|--|
| 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). Get medical attention. Wash clothi 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: | DO NOT induce vomiting unless directed to do so by medical personnel. Rinse the mouth. Drink 1-2 glasses of water. Never give anything by mouth an unconscious person. Get medical attention. |
| Symptoms: | See Section 11. |
| 5. F | IRE FIGHTING MEASURES |
| Extinguishing media: | Water spray (fog), foam, dry chemical or carbon dioxide. |
| Special firefighting procedures: | Wear self-contained breathing apparatus and full protective clothing, such a turn-out gear. |
| Unusual fire or explosion hazards: | Burning produces obnoxious and toxic fumes. Personnel in vicinity and downwind should be evacuated. Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazardous combustion products: | Oxides of carbon. Oxides of nitrogen. Ammonia. Amines. Phenolics. Toxic fumes. Irritating vapors. |
| 6. ACCI | DENTAL 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: | Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for disposal. |

7. HANDLING AND STORAGE

Handling:

Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed.

Storage:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away from heat, spark and flame.

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 Component(s) | ACGIH TLV | OSHA PEL | AIHA WEEL | OTHER |
|--|--|--|---|-------|
| Tetraethylene pentamine | None | None | (SKIN) Aerosol. 1 ppm (5 mg/m3) TWA Aerosol. (Skin sensitizer) | None |
| Substituted piperazine | None | None | None | None |
| Aluminium hydroxide | 10 mg/m3 TWA (as Al) Total dust. 1 mg/m3 TWA Respirable fraction. | 15 mg/m3 TWA (as Al) Total dust. 5 mg/m3 TWA (as Al) Respirable fraction. | None | None |
| Silica, amorphous, fumed, crystal-free | 10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction. | 20 MPPCF TWA 0.8 mg/m3 TWA | None | None |
| Polyamine | None | None | None | None |
| Titanium dioxide | 10 mg/m3 TWA | 15 mg/m3 PEL Total dust. | None | None |
| Amine adduct | None | None | None | None |
| Triethylenetetramine | None | None | 1 ppm (6 mg/m3) TWA (SKIN) | None |

Engineering controls:

Respiratory protection:

Eye/face protection:

Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

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

Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Liquid

Clear

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower:

Strong, ammoniacal Not available. Not applicable Not available. > 149 °C (> 300.2 °F) Not available. 1.02 8.45 > 149 °C (> 300.2 °F) Not available.

Skin protection:

Flammable/Explosive limits - upper: Autoignition temperature: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature:

Not available. Not available. Not available. Slightly soluble Not available. Not available. Not available. Not available.

10. STABILITY AND REACTIVITY

| Stability: | Stable under normal conditions of storage and use. | | |
|--------------------------------------|---|--|--|
| Hazardous reactions: | None under normal processing. | | |
| Hazardous decomposition products: | Oxides of carbon. Oxides of nitrogen. Ammonia. Amines. Phenolics. Toxic fumes. Irritating vapors. | | |
| Incompatible materials: | Oxidizing agents. Acids. Acrylates. Alcohols. Aldehydes. Ketones. Nitrites. Nitrous acid and other nitrosating agents. CAUTION! N-nitrosamines (many of which are known to be potent carcinogens) may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Peroxides. Sodium hypochlorite. This product slowly corrodes copper, aluminum, zinc and galvanized surfaces. | | |
| Reactivity: | Not available. | | |
| Conditions to avoid: | Keep away from heat, ignition sources and incompatible materials. The exotherm has the potential for release of toxic gasses. Avoid temperatures above 294°C (561°F). 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 | | |

| Product toxicity data: | Not available. |
|------------------------------|-----------------------------------|
| Relevant routes of exposure: | Skin, Inhalation, Eyes, Ingestion |

Potential Health Effects/Symptoms

| Inhalation: | Mists, vapors or liquid may cause severe irritation or burns. |
|---------------|---|
| Skin contact: | Causes skin burns. May cause allergic skin reaction. |
| Eye contact: | Causes serious eye damage. |
| Ingestion: | If ingested, severe burns of the mouth and throat may occur, as well as perforation of the esophagus and the stomach. |

| Hazardous Component(s) | LD50s and LC50s | Immediate and Delayed Health Effects | |
|--|---|--|--|
| Tetraethylene pentamine | Oral LD50 (RAT) = 3.99 g/kg Oral LD50 (RAT) = 2.1 g/kg Dermal LD50 (RABBIT) = 0.66 g/kg | Irritant, Mutagen, Allergen | |
| Substituted piperazine | None | No Records | |
| Aluminium hydroxide | Oral LD50 (RAT) = > 5,000 mg/kg | Irritant, Lung, Respiratory | |
| Silica, amorphous, fumed, crystal-free | None | Nuisance dust | |
| Polyamine | None | Irritant, Allergen | |
| Titanium dioxide | None | Irritant, Respiratory, Some evidence of carcinogenicity | |
| Amine adduct | None | No Records | |
| Triethylenetetramine | None | Allergen, Corrosive, Developmental, Irritant, Mutagen | |

| Hazardous Component(s) | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|--|----------------|-----------------|---|
| Tetraethylene pentamine | No | No | No |
| Substituted piperazine | No | No | No |
| Aluminium hydroxide | No | No | No |
| Silica, amorphous, fumed, crystal-free | No | No | No |
| Polyamine | No | No | No |
| Titanium dioxide | No | Group 2B | No |
| Amine adduct | No | No | No |
| Triethylenetetramine | No | No | No |

12. ECOLOGICAL INFORMATION

Ecological information:

Not known.

13. DISPOSAL CONSIDERATIONS

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

Hazardous waste number:

It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

| U.S. Department of Transportation Ground (49 CFR |
|--|
|--|

| Proper shipping name: | Amines, liquid, corrosive, n.o.s. (Tetraethylene pentamine, Polyethylenepolyamine) |
|---------------------------|--|
| Hazard class or division: | 8 |
| Identification number: | UN 2735 |
| Packing group: | II. |
| Marine pollutant: | Tetraethylene pentamine, Polyethylenepolyamine |
| - | |

| Amines, liquid, corrosive, n.o.s. (Tetraethylene pentamine, Polyethylenepolyamine) 8 UN 2735 II |
|--|
| |
| AMINES, LIQUID, CORROSIVE, N.O.S. (Tetraethylene pentamine, Polyethylenepolyamine) |
| 8 |
| UN 2735 |
| ll |
| Tetraethylene pentamine, Polyethylenepolyamine |
| |

15. REGULATORY INFORMATION

United States Regulatory Information

| TSCA 8 (b) Inventory Status: TSCA 12 (b) Export Notification: | All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. None above reporting de minimis | |
|--|---|--|
| CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313: | None above reporting de minimis Immediate Health, Delayed Health None above reporting de minimis | |
| California Proposition 65: | This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. | |
| Canada Regulatory Information | | |
| CEPA DSL/NDSL Status: | All components are listed on or are exempt from listing on the Canadian Domestic Substances List. | |

16. OTHER INFORMATION

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

Prepared by: Rena Petrides, Regulatory Affairs Specialist

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