Material Safety Data Sheet

Revision Number: 002.1 **Issue date:** 02/27/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **3163 ENCAP HARDENER 1QT CN**
Product type: Epoxy Hardener

IDH number: 233565
Item number: EB6057-B30
Region: United States

Company address:
Henkel Corporation
211 Franklin Street
Olean, New York 14760

Contact information:
Telephone: 716.372.6300
Emergency telephone: 860.571.5100
Internet: www.electronics.henkel.us

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state: Liquid
Color: Amber
Odor: Irritating, Ammoniacal

HEALTH: *2
FLAMMABILITY: 1
PHYSICAL HAZARD: 0
Personal Protection: See MSDS Section 8

WARNING: HARMFUL IF INHALED.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
MAY BE HARMFUL IF SWALLOWED.

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

Potential Health Effects

Inhalation: Harmful by inhalation. May cause irritation to nose and throat. Tightness of the chest. Coughing. Shortness of breath.

Skin contact: May cause skin irritation. May cause allergic skin reaction.

Eye contact: Moderate eye irritation. May cause corneal injury. Corneal edema may give appearance of "blue haze" or "fog" around lights. Conjunctivitis.

Ingestion: Contains material that may be slightly toxic.

Existing conditions aggravated by exposure: Eye, skin and respiratory disorders. Pre-existing skin or lung allergies may increase the chance of developing exaggerated allergic symptoms from exposure to this product.

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	%
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	68953-36-6	60 - 100
3,6,9-Triazaundecamethylenediamine	112-57-2	10 - 30

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: After contact with skin, wash immediately with plenty of water. Remove contaminated clothing and footwear. Get medical attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Check for and remove any contact lenses. Get medical attention.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Keep individual calm. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point: 195 °C (383°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. Sand. Limestone powder.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Unusual fire or explosion hazards: Decomposition and combustion products may be toxic.

Hazardous combustion products: Ammonia. Toxic fumes. Oxides of carbon. Oxides of nitrogen. Irritating organic vapours.

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: Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Remove all sources of ignition. Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling: When using do not eat, drink or smoke. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing.

Storage: 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 1-716-372-6300.

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
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	None	None	None	None
3,6,9-Triazaundecamethylenediamine	None	None	1 ppm (5 mg/m3) TWA Aerosol. (SKIN) Aerosol. (Skin sensitizer)	None

Engineering controls:	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
Respiratory protection:	Use a NIOSH approved respirator if ventilation is inadequate.
Eye/face protection:	Safety goggles or safety glasses with side shields.
Skin protection:	Heat and chemical resistant gloves. Nitrile gloves. Butyl rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Amber
Odor:	Irritating, Ammoniacal
Odor threshold:	Not available
pH:	Not available
Vapor pressure:	< 10.34 mm Hg
Boiling point/range:	> 204.4 °C (> 399.9 °F)
Melting point/ range:	Not available
Specific gravity:	0.95
Vapor density:	10.3 (Air = 1)
Flash point:	195 °C (383°F)
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Autoignition temperature:	Not available
Evaporation rate:	< 0.1
Solubility in water:	Soluble
Partition coefficient (n-octanol/water):	Not available
VOC content:	< 1 %; < 10 g/l (estimated value for resin and hardener mixed together)

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	None known
Hazardous decomposition products:	Nitric acid. Ammonia. Oxides of nitrogen. Oxides of carbon. Nitrosamines.
Incompatible materials:	Nitrous acid and other nitrosating agents. Acids. Strong mineral acids. Oxidizing agents. This product slowly corrodes copper, aluminum, zinc and galvanized surfaces. 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.
Conditions to avoid:	Store away from incompatible materials. Keep away from open flames, hot surfaces and sources of ignition. See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).

11. TOXICOLOGICAL INFORMATION

Acute oral product toxicity:	LD50 (rat) > 2,000 mg/kg (Estimated)
Acute dermal product toxicity:	LD50 (rabbit) > 8,550 mg/kg

Hazardous components	**NTP Carcinogen**	**IARC Carcinogen**	**OSHA Carcinogen (Specifically Regulated)**
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	No	No	No
3,6,9-Triazaundecamethylenediamine	No	No	No

Hazardous components	Health Effects/Target Organs
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	No Records
3,6,9-Triazaundecamethylenediamine	Irritant, Mutagen, Allergen

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

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

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

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: None above reporting de minimus

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL 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

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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