



Revision Number: 002.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE PC 3997 B known as LOCTITE HS NOVALAC 1.28KG B	IDH number:	1634250
Product type:	Epoxy Hardener	Item number:	1633948_1614171
Restriction of Use:	None identified	Region:	United States
Company address:	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	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.
MAY CAUSE AN ALLERGIC SKIN REACTION.

HAZARD CLASS	HAZARD CATEGORY
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention:	Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye 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 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*
Formaldehyde amine polymer	Proprietary	60 - 100
Triethylenetetramine	112-24-3	5 - 10
Phenol	108-95-2	1 - 5

* 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 breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Symptoms:	See Section 11.

5. FIRE 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 as turn-out gear.
Unusual fire or explosion hazards:	In case of fire, keep containers cool with water spray. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Ammonia. Toxic fumes. Irritating vapors.

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. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

- Handling:** Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed. Refer to Section 8.
- Storage:** Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store away from heat, sparks, flames, or other sources of ignition.

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
Formaldehyde amine polymer	None	None	None	None
Triethylenetetramine	None	None	1 ppm (6 mg/m ³) TWA (SKIN)	None
Phenol	5 ppm TWA (SKIN)	5 ppm (19 mg/m ³) PEL (SKIN)	None	None

- Engineering controls:** Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
- Respiratory protection:** Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.
- Eye/face protection:** Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.
- Skin protection:** 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:** Liquid
- Color:** Amber
- Odor:** Faint, Phenol-like
- Odor threshold:** Not available.
- pH:** Not available.
- Vapor pressure:** Not available.
- Boiling point/range:** Not available.
- Melting point/ range:** Not available.
- Specific gravity:** 1.06 at 77 °F (25°C)
- Vapor density:** Not available.
- Flash point:** > 93.33 °C (> 199.99 °F) Pensky Martens closed cup
- Flammable/Explosive limits - lower:** Not available.
- Flammable/Explosive limits - upper:** Not available.
- Autoignition temperature:** Not available.
- Evaporation rate:** Not available.
- Solubility in water:** Not available.
- Partition coefficient (n-octanol/water):** Not available.
- VOC content:** 4.56 g/l (value for resin and hardener together) (estimated)
- Viscosity:** Not available.
- Decomposition temperature:** 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. Toxic fumes. Irritating vapors.
Incompatible materials:	Oxidizing agents. Acids. 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.
Reactivity:	Not available.
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

Inhalation:	Inhalation of vapors or mists of the product may be irritating to the respiratory system. Coughing. Chest pain.
Skin contact:	Corrosive to skin. Causes skin burns. May cause allergic skin reaction.
Eye contact:	Causes serious eye damage. Causes eye burns. Burns of the eye may cause blindness. Conjunctivitis. Corneal edema may give appearance of "blue haze" or "fog" around lights.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may cause bleeding of the gastrointestinal tract and the vomiting of blood.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Formaldehyde amine polymer	None	No Records
Triethylenetetramine	None	Allergen, Corrosive, Developmental, Irritant, Mutagen
Phenol	Oral LD50 (RAT) = 317 mg/kg Oral LD50 (RAT) = 530 mg/kg Dermal LD50 (RAT) = 669 mg/kg Dermal LD50 (RABBIT) = 850 mg/kg	Blood, Cardiac, Corrosive, Developmental, Eyes, Irritant, Kidney, Liver, Mutagen, Nervous System, Skin, Vascular

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Formaldehyde amine polymer	No	No	No
Triethylenetetramine	No	No	No
Phenol	No	No	No

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:	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:	Polyamines, liquid, corrosive, n.o.s. (Formaldehyde, polymer with benzenamine, hydrogenated)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	III
DOT Hazardous Substance(s):	Phenol

International Air Transportation (ICAO/IATA)

Proper shipping name:	Polyamines, liquid, corrosive, n.o.s. (Formaldehyde, polymer with benzenamine, hydrogenated)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	III

Water Transportation (IMO/IMDG)

Proper shipping name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Formaldehyde, polymer with benzenamine, hydrogenated)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	III

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 minimis
CERCLA/SARA Section 302 EHS:	Phenol (CAS# 108-95-2).
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA 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 (40 CFR 372). Phenol (CAS# 108-95-2).
CERCLA Reportable quantity:	Phenol (CAS# 108-95-2) 1,000 lbs. (454 kg)
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
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16. OTHER INFORMATION

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

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