Material Safety Data Sheet





Revision Date: 01/14/2005 Issue date: 01/14/2005

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name:

Loctite(R) Nordbak(R) Wearing Compound

Product type: E

Epoxy Hardener

Company address: Henkel Corporation 1001 Trout Brook Crossing Rocky Hill, Connecticut 06067 Item No. : 99812_HARDENER
Region: United States

Contact Information: Telephone: 860.571.5100

Emergency telephone: 860.571.5100

Internet: www.loctite.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components Aluminum oxide 1344-28-1	% 30-60	ACGIH TLV 10 mg/m³ TWA particulate matter containing no asbestos and < 1% crystalline silica	OSHA PEL 15 mg/m³ TWA total dust 5 mg/m³ TWA respirable fraction	OTHER None
Silicon carbide 409-21-2	10-30		15 mg/m³ TWA total dust 5 mg/m³ TWA respirable fraction	None
Amine adduct 68082-29-1	1-5	None	None	None
Amine reacted fatty acid 68953-36-6	1-5	None	None	None
N-(2-Aminoethyl)piperazine 140-31-8	1-5	None		None
Magnesium oxide 1309-48-4	1-5	10 mg/m³ TWA inhalable fraction	15 mg/m³ TWA total particulate	None
Silica, amorphous (fumed) 7631-86-9	1-5	6 mg/m³ TWA	10 mg/m³ TWA	3 mg/m³ TWA respirable dust
Triethylenetetramine 112-24-3	1-5	None	None	None
Nonylphenol 25154-52-3	1-5	None	None	None

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3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state: Paste Color: Dark of

Odor:

Paste Dark grey Ammoniacal HEALTH: FLAMMABILITY: PHYSICAL HAZARD: 3* 1 1

Personal Protection:

See Section 8

DANGER:

CAUSES EYE AND SKIN BURNS.

MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.
MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure:

Eye contact, Ingestion, Inhalation, Skin contact

Potential Health Effects

Inhalation:

Allergic respiratory reaction. May cause respiratory tract irritation. May cause irritation to nose and

throat.

Skin contact: Eye contact:

Ingestion:

May cause skin burns. Allergic skin reaction. Rash. Redness. May be harmful if absorbed through skin. Burns. Severe eye irritation. Redness. Tissue damage. Tearing. Pain and discomfort. Corneal edema

may give appearance of "blue haze" or "fog" around lights.

May be harmful if swallowed. May cause burns of mouth and throat if swallowed.

Existing conditions aggravated by

exposure:

Skin disorders. Skin allergies. Respiratory disorders. Asthma. Eye disorders.

See Section 11 for additional toxicological information.

4. FIRST AID NEASURES

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get

medical attention.

Skin contact:

Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if

symptoms occur.

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. Keep individual calm. Get

medical attention immediately.

Notes to physician:

None.

5. FIRE-FIGHTING MEASURES

Flash point:

149°C (300°F)

Tagliabue closed cup

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 fire fighting procedures:

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

Unusual fire or explosion hazards:

In the event of fire, cool tanks with water spray.

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Hazardous combustion products:

Oxides of carbon. Oxides of nitrogen. Ammonia. Phenolics. Nitric acid. Irritating organic fragments.

Aldehydes.

6 ACCIDENTAL RELEASE MEASURES

Environmental precautions:

Prevent product from entering drains or open waters.

Clean-up methods:

Remove all ignition sources. Immediately contact emergency personnel. Soak up with inert absorbent. Store in a closed container until ready for disposal. Dispose of in accordance with local and national

regulations.

7. HANDLING AND STORAGE

Handling:

Do not taste or swallow. Avoid contact with eyes, skin and clothing. Do not breathe mist or vapors. Use

only with adequate ventilation. Keep container closed. 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.

Incompatible products:

Refer to Section 10.

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:

Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.

Respiratory protection:

Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits

exists.

Skin protection:

Chemical resistant, impermeable gloves. Use chemical resistant, impermeable clothing including

gloves and either an apron or body suit to prevent skin contact.

Eye/face protection:

Chemical splash goggles or safety glasses with side shields. Full face protection should be used if the

potential for splashing or spraying of product exists.

See Section 2 for exposure limits.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Color:

Paste Dark grey

Odor:

Ammoniacal

Vapor pressure:

Not available

pH: Boiling point/range: Not applicable Not applicable

Melting point/range:

Not available

Specific gravity:

2.414

Vapor density: Evaporation rate: Not applicable Not applicable

Solubility in water:

Slightly soluble

Not available

Partition coefficient (n-octanol/water): VOC content:

Not available

STABILITY AND REACTIVITY

Stability:

Stable

Hazardous polymerization:

Will not occur.

Hazardous decomposition products:

None

Incompatability:

Strong Lewis acids. Strong mineral acids. Strong bases. Strong oxidizers.

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Storage with incompatible materials.

11. TOXICOLOGICAL INFORMATION

Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Aluminum oxide 1344-28-1	No	No	No
Silicon carbide 409-21-2	No	No	No
Amine adduct 68082-29-1	No	No	No
Amine reacted fatty acid 68953-36-6	No	No	No
N-(2-Aminoethyl)piperazine 140-31-8	No	No	No
Magnesium oxide 1309-48-4	No	No	No
Silica, amorphous (fumed) 7631-86-9	No	No	No
Triethylenetetramine 112-24-3	No	No	No
Nonylphenol 25154-52-3	No	No	No

Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs		
Aluminum oxide 1344-28-1	Corrosive, Irritant, Nuisance dust		
Silicon carbide 409-21-2	Nuisance dust		
Amine adduct 68082-29-1	No Records		
Amine reacted fatty acid 68953-36-6	No Records		
N-(2-Aminoethyl)piperazine 140-31-8	Irritant		
Magnesium oxide 1309-48-4	Blood, Central nervous system, Immune system, Imitant		
Silica, amorphous (fumed) 7631-86-9	Nuisance dust		
Triethylenetetramine 112-24-3	Allergen, Developmental, Irritant, Mutagen		
Nonylphenol 25154-52-3	Allergen, Corrosive, Irritant, Kidney		

12. ECOLOGICAL INFORMATION

Ecological information:

Not available

- 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:

Dispose according to EPA and local governmental regulations.

EPA hazardous waste number:

Not a RCRA hazardous waste.

14, TRANSPORT INFORMATION

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

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

Proper shipping name:

AMINES, SOLID, CORROSIVE, N.O.S. (Triethylenetetramine / aminoethylpiperazine)

Hazard class or division:

Identification number:

UN 3259 Ш

Packing group: Exceptions:

(Not more than 5 kg) Consumer Commodity ORM-D

International Air Transportation (ICAO/IATA):

Proper shipping name:

AMINES, SOLID, CORROSIVE, N.O.S. (triethylenetetramine / aminoethylpiperazine)

Hazard class or division:

Identification number: Packing group:

UN3259

WaterTransportation (IMO/IMDG):

Proper shipping name:

AMINES, SOLID, CORROSIVE, N.O.S. (triethylenetetramine / aminoethylpiperazine)

Hazard class or division: Identification number:

UN3259

Packing group:

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Marine pollutant:

Nonylphenol

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:

Diethanolamine (CAS#111-42-2).

CERCLA/SARA Section 302 EHS:

None above reporting de minimus.

CERCLA/SARA Section 311/312:

Immediate Health Hazard

CERCLA/SARA 313:

None above reporting de minimus.

California Proposition 65:

This product contains a chemical known to the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status:

All components are listed on or are exempt from listing on the Domestic Substances List.

WHMIS hazard class:

D.1.B, D.2.B, E

This material safety data sheet contains changes from the previous version in sections: Revised to new format.

Prepared by:

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