Material Safety Data Sheet

Revision Date: 05/25/2006 **Issue date:** 05/25/2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Nordbak Castable Wearing Com
Product type: Epoxy Hardener
Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

Item No. : 98992_151000 / IDH No. 702274
Region: United States
Contact Information:
Telephone: (860) 571-5100
Emergency telephone: (860) 571-5100
Internet: www.henkelna.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components	%	ACGIH TLV	OSHA PEL	OTHER
Amine reacted fatty acid Proprietary	30-60	None	None	None
N-(2-Aminoethyl)piperazine 140-31-8	10-30	None	None	None
Nonylphenol 25154-52-3	10-30	None	None	None
Diethylene triamine 111-40-0	5-10	1 ppm TWA (skin)	None	None
4,4`-Isopropylidenediphenol 80-05-7	5-10	None	None	None
Titanium dioxide 13463-67-7	1-5	10 mg/m³ TWA	15 mg/m³ TWA total dust	None
Tetraethylenepentamine 112-57-2	1-5	None	None	5 mg/m³, skin, dermal sensitizer TWA, (WEEL)

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state: Liquid
Color: Clear
Odor: Slight, Amine

HEALTH: 3*
FLAMMABILITY: 1
PHYSICAL HAZARD: 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: Eyes, Skin, Inhalation, Ingestion

Potential Health Effects

Inhalation: Allergic respiratory reaction. Sensitization. Moderate respiratory tract irritation. Shortness of breath. Coughing.

Skin contact:	May be harmful if absorbed through skin. Allergic skin reaction. Itching. Causes skin burns. Pain and discomfort. Tissue damage.
Eye contact:	Causes eye burns. Blurred vision. Excess tearing. Pain and discomfort. Tissue damage. Permanent damage. Liquid, aerosols or vapor are irritating and can cause tearing, reddening and swelling. Corneal edema may give appearance of "blue haze" or "fog" around lights.
Ingestion:	May be harmful if swallowed. Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract if swallowed. May cause an aspiration hazard if swallowed. If swallowed, may be aspirated into the lungs resulting in inflammation and possible fluid accumulation.
Existing conditions aggravated by exposure:	Respiratory disorders. Skin disorders. Eye disorders. Asthma.

See Section 11 for additional toxicological information.

4. FIRST AID MEASURES

Inhalation:	Remove to fresh air. If discomfort persists seek medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
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.
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. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Notes to physician:	None.

5. FIRE-FIGHTING MEASURES

Flash point:	Greater than 93ºC (200ºF) Setaflash
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:	None
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Ammonia. Phenolics. Nitric acid.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions:	Prevent product from entering drains or open waters.
Clean-up methods:	Scrape up as much material as possible. Clean residue with soap and water. Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Handling:	Do not get on skin or clothing. Avoid contact with eyes, skin and clothing. Do not breathe mist or vapors. Do not get in eyes. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Storage:	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.
Incompatible products:	Not available

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 with an organic vapor cartridge.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Butyl rubber gloves. Nitrile gloves. Viton gloves.

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: Liquid
Color: Clear
Odor: Slight, Amine
Vapor pressure: Not available
pH: Not applicable
Boiling point/range: Not available
Melting point/range: Not available
Specific gravity: 0.99
Vapor density: Not applicable
Evaporation rate: Not applicable
Solubility in water: Soluble.
Partition coefficient (n-octanol/water): Not available
VOC content: <1.0%; <10 grams/liter (value for resin and hardener together) (estimated)

10. 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.

Conditions to avoid: None known.

11. TOXICOLOGICAL INFORMATION

Product toxicity data: Not available

Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Amine reacted fatty acid Proprietary	No	No	No
N-(2-Aminoethyl)piperazine 140-31-8	No	No	No
Nonylphenol 25154-52-3	No	No	No
Diethylene triamine 111-40-0	No	No	No
4,4`-Isopropylidenediphenol 80-05-7	No	No	No
Titanium dioxide 13463-67-7	No	No	No
Tetraethylenepentamine 112-57-2	No	No	No

Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
Amine reacted fatty acid Proprietary	No Records
N-(2-Aminoethyl)piperazine 140-31-8	Irritant, Corrosive, Allergen
Nonylphenol 25154-52-3	Allergen, Corrosive, Irritant, Kidney
Diethylene triamine 111-40-0	Allergen, Eyes, Irritant
4,4`-Isopropylidenediphenol 80-05-7	Allergen, Blood, Irritant, Kidney, Spleen, Reproductive
Titanium dioxide 13463-67-7	Irritant, Respiratory
Tetraethylenepentamine 112-57-2	Mutagen, Irritant, Allergen

12. ECOLOGICAL INFORMATION

Ecological information: Not known

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

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

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Aminoethylpiperazine , Nonylphenol)
Hazard class or division: 8
Identification number: UN 2735
Packing group: III
Exceptions: (Not more than 5 L) Consumer Commodity ORM-D

International Air Transportation (ICAO/IATA):

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Aminoethylpiperazine , Nonylphenol)
Hazard class or division: 8
Identification number: UN2735
Packing group: III

WaterTransportation (IMO/IMDG):

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Aminoethylpiperazine , Nonylphenol)
Hazard class or division: 8
Identification number: UN2735
Packing group: III
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: None.

CERCLA/SARA Section 302 EHS: None.
CERCLA/SARA Section 311/312: Immediate Health Hazard, Delayed Health Hazard
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: 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 Domestic Substances List.
WHMIS hazard class: E, D.2.A, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New information added in section(s): 2

Prepared by: Regulatory Affairs

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