



Revision Number: 001.1

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1. PRODUCT AND COMPANY IDENTIFICATION

| | | | |
|-------------------------------|---------------------------------------|-----------------------------------|---------------|
| Product name: | Nordbak Fast Cure Wearing CMPD | IDH number: | 702207 |
| Product type: | Epoxy Hardener | Item number: | 96373_313000 |
| | | Region: | United States |
| Company address: | | Contact information: | |
| Henkel Corporation | | Telephone: 860.571.5100 | |
| One Henkel Way | | Emergency telephone: 860.571.5100 | |
| Rocky Hill, Connecticut 06067 | | Internet: www.henkelna.com | |

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

| | | | |
|------------------------|--------------------|-----------------------------|--------------------|
| Physical state: | Paste | HMIS: | |
| Color: | Blue | HEALTH: | *3 |
| Odor: | Slight, Ammoniacal | FLAMMABILITY: | 1 |
| | | PHYSICAL HAZARD: | 1 |
| | | Personal Protection: | See MSDS 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.
COMBUSTIBLE LIQUID AND VAPOR.

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

Potential Health Effects

| | |
|----------------------|---|
| Inhalation: | May cause allergic respiratory reaction. Moderate respiratory tract irritation. Shortness of breath. Coughing. |
| Skin contact: | May be harmful if absorbed through skin. May cause 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: Eye, skin, and respiratory disorders. Asthma.

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 | % |
|-----------------------------|------------|---------|
| Aluminum oxide, fibrous | 1344-28-1 | 30 - 60 |
| Silicon carbide | 409-21-2 | 10 - 30 |
| N-Aminoethylpiperazine | 140-31-8 | 5 - 10 |
| 4,4'-Isopropylidenediphenol | 80-05-7 | 5 - 10 |
| Silicon dioxide | 7631-86-9 | 1 - 5 |
| Nonylphenol | 25154-52-3 | 1 - 5 |
| Magnesium oxide | 1309-48-4 | 1 - 5 |
| Triethanolamine | 102-71-6 | 1 - 5 |
| Diethylenetriamine | 111-40-0 | 1 - 5 |
| Polyoxypropylentriamine | 64852-22-8 | 1 - 5 |

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. 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. |

5. FIRE FIGHTING MEASURES

| | |
|--|--|
| Flash point: | 88 °C (190.4 °F) Setaflash 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 firefighting 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

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: | Immediately contact emergency personnel. Remove all sources of ignition. Keep unnecessary personnel away. 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 taste or swallow. Remove all sources of ignition. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation.

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 (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 components | ACGIH TLV | OSHA PEL | AIHA WEEL | OTHER |
|-----------------------------|--|--|-----------|-------------------------------------|
| Aluminum oxide, fibrous | 1 mg/m3 TWA Respirable fraction. | 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. | None | None |
| Silicon carbide | 10 mg/m3 TWA Inhalable fraction. 3 mg/m3 TWA Respirable fraction. | 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. | None | None |
| N-Aminoethylpiperazine | None | None | None | None |
| 4,4'-Isopropylidenediphenol | None | None | None | None |
| Silicon dioxide | 6 mg/m3 TWA | 20 MPPCF TWA 0.8 mg/m3 TWA | None | 3 mg/m3 TWA Respirable fraction. |
| Nonylphenol | None | None | None | None |
| Magnesium oxide | 10 mg/m3 TWA Inhalable fraction. | 15 mg/m3 TWA Total particulate. | None | None |
| Triethanolamine | 5 mg/m3 TWA | None | None | None |
| Diethylenetriamine | 1 ppm TWA (SKIN) | None | None | None |
| Polyoxypropylentriamine | None | None | None | None |

Engineering controls:

Not available

Respiratory protection:

Use a NIOSH approved air-purifying respirator with an organic vapor cartridge.

Eye/face protection:

Safety goggles or safety glasses with side shields.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------------------|---------------------------------------|
| Physical state: | Paste |
| Color: | Blue |
| Odor: | Slight, Ammoniacal |
| Odor threshold: | Not available |
| pH: | Not available |
| Vapor pressure: | Not available |
| Boiling point/range: | Not applicable |
| Melting point/ range: | Not available |
| Specific gravity: | 2.716 |
| Vapor density: | Not available |
| Flash point: | 88 °C (190.4 °F) Setaflash 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: Slight
Partition coefficient (n-octanol/water): Not available
VOC content: < 1.0 %; < 10 g/l (value for resin and hardener together) (estimated)

10. STABILITY AND REACTIVITY

Stability: Stable
Hazardous reactions: Will not occur.
Hazardous decomposition products: None
Incompatible materials: Strong Lewis acids. Strong mineral acids. Strong bases. Strong oxidizing agents.
Conditions to avoid: None known

11. TOXICOLOGICAL INFORMATION

| Hazardous components | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|-----------------------------|----------------|-----------------|---|
| Aluminum oxide, fibrous | No | No | No |
| Silicon carbide | No | No | No |
| N-Aminoethylpiperazine | No | No | No |
| 4,4'-Isopropylidenediphenol | No | No | No |
| Silicon dioxide | No | No | No |
| Nonylphenol | No | No | No |
| Magnesium oxide | No | No | No |
| Triethanolamine | No | No | No |
| Diethylenetriamine | No | No | No |
| Polyoxypropylentriamine | No | No | No |

| Hazardous components | Health Effects/Target Organs |
|-----------------------------|---|
| Aluminum oxide, fibrous | Irritant, Nuisance dust, Corrosive |
| Silicon carbide | Nuisance dust |
| N-Aminoethylpiperazine | Irritant, Corrosive, Allergen |
| 4,4'-Isopropylidenediphenol | Allergen, Blood, Irritant, Kidney, Reproductive, Spleen |
| Silicon dioxide | Nuisance dust |
| Nonylphenol | Allergen, Corrosive, Irritant, Kidney |
| Magnesium oxide | Blood, Central nervous system, Immune system, Irritant |
| Triethanolamine | Irritant, Allergen |
| Diethylenetriamine | Allergen, Irritant, Eyes |
| Polyoxypropylentriamine | No Records |

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: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

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

Proper shipping name: Amines, solid, corrosive, n.o.s. (Aminoethylpiperazine, Diethylenetriamine)
Hazard class or division: 8
Identification number: UN 3259
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Amines, solid, corrosive, n.o.s. (Aminoethylpiperazine, Diethylenetriamine)
Hazard class or division: 8
Identification number: UN 3259
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: AMINES, SOLID, CORROSIVE, N.O.S. (Aminoethylpiperazine, Diethylenetriamine)
Hazard class or division: 8
Identification number: UN 3259
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 minimus

CERCLA/SARA Section 302 EHS: None above reporting de minimus

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

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). Aluminum oxide, fibrous (CAS# 1344-28-1). 4,4'-Isopropylidenediphenol (CAS# 80-05-7).

California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

WHMIS hazard class: B.3, D.2.A, D.2.B, E

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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