

Material Safety Data Sheet



Revision Number: 003.2

Issue date: 01/03/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	Nordbak FastCure PneuWear RESIN	IDH number:	702204
Product type:	Epoxy resin	Item number:	96363_10241000
		Region:	United States
Company address:	Contact information:		
Henkel Corporation	Telephone: 880.571.5100		
One Henkel Way	MEDICAL EMERGENCY Phone: Poison Control Center		
Rocky Hill, Connecticut 06067	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

Physical state:	Liquid	HEALTH:	*2
Color:	Dark grey	FLAMMABILITY:	1
Odor:	Epoxy	PHYSICAL HAZARD:	0
		Personal Protection:	See MSDS Section 8

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

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

Potential Health Effects

Inhalation:	Moderate respiratory tract irritation. May cause irritation to nose and throat.
Skin contact:	May cause allergic skin reaction. Moderate skin irritation. Itching. Redness.
Eye contact:	Moderate eye irritation. Redness. Excess tearing.
Ingestion:	May be harmful if swallowed. May cause gastrointestinal tract irritation if swallowed.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders. Skin allergies.

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
Epoxy resin	Proprietary	10 - 30
Silicon carbide	409-21-2	5 - 10
Silicon dioxide	7631-86-9	1 - 5
Magnesium oxide	1309-48-4	1 - 5
Treated fumed silica	67762-90-7	1 - 5
Neopentyl glycol diglycidyl ether	17557-23-2	1 - 5
2-Ethylhexyl glycidyl ether	2461-15-6	1 - 5
Titanium dioxide	13463-67-7	0.1 - 1

IDH number: 702204

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Product name: Nordbak FastCure PneuWear RESIN

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.
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. Never give anything by mouth to an unconscious person. If symptoms develop and persist, get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	> 93 °C (> 199.4 °F) ; Estimated
Autoignition temperature:	Not available.
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Extinguishing media:	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. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Aldehydes. Irritating organic fragments.

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. Immediately contact emergency personnel. 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 closed container until ready for disposal.

7. HANDLING AND STORAGE

Handling:	Keep away from heat, spark and flame. Do not breathe gas/fumes/vapor/spray. Keep container closed. Avoid contact with eyes, skin and clothing. 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.

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
Epoxy resin	None	None	None	None
Silicon carbide	0.1 FIBERS/CM3 TWA Fiber. 3 mg/m3 TWA Respirable fraction. 10 mg/m3 TWA Inhalable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Silicon dioxide	6 mg/m3 TWA	20 MPPCF TWA 0.8 mg/m3 TWA	None	3 mg/m3 TWA Respirable fraction.
Magnesium oxide	10 mg/m3 TWA Inhalable fraction.	15 mg/m3 TWA Total particulate.	None	None
Treated fumed silica	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Neopentyl glycol diglycidyl ether	None	None	None	None
2-Ethylhexyl glycidyl ether	None	None	None	None
Titanium dioxide	10 mg/m3 TWA	15 mg/m3 TWA Total dust.	None	None

Engineering controls:	Use local exhaust ventilation if the potential for airborne exposure exists.
Respiratory protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
Eye/face protection:	Safety goggles or safety glasses with side shields.
Skin protection:	Chemical resistant, impermeable gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Dark grey
Odor:	Epoxy
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	Not available.
Boiling point/range:	Not available.
Melting point/ range:	Not available.
Specific gravity:	Not available.
Vapor density:	Not available.
Flash point:	> 93 °C (> 199.4 °F) ; Estimated
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:	< 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 acids and strong bases. Strong oxidizing agents.
Conditions to avoid:	Heat, flames, sparks and other sources of ignition. Excessive heat. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aluminum oxide, fibrous	No	No	No
Epoxy resin	No	No	No
Silicon carbide	No	No	No
Silicon dioxide	No	No	No
Magnesium oxide	No	No	No
Treated fumed silica	No	No	No
Neopentyl glycol diglycidyl ether	No	No	No
2-Ethylhexyl glycidyl ether	No	No	No
Titanium dioxide	No	Group 2B	No

Hazardous components	Health Effects/Target Organs
Aluminum oxide, fibrous	Irritant, Nuisance dust, Corrosive
Epoxy resin	Allergen, Irritant
Silicon carbide	Nuisance dust
Silicon dioxide	Nuisance dust
Magnesium oxide	Blood, Central nervous system, Immune system, Irritant
Treated fumed silica	Irritant
Neopentyl glycol diglycidyl ether	Allergen, Blood, Bone Marrow, Immune system, Irritant, Reproductive
2-Ethylhexyl glycidyl ether	Mutagen
Titanium dioxide	Irritant, Respiratory, Some evidence of carcinogenicity

12. ECOLOGICAL INFORMATION

Ecological information:	Not available.
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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

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

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 minimis
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA 313:	None above reporting de minimis
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDL 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: 1

Prepared by: Gary Pierson, Manager, Regulatory Affairs

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Material Safety Data Sheet



Revision Number: 002.2

Issue date: 02/08/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Nordbak Fast Cure Pneu Wear
Product type: Epoxy Hardener

IDH number: 702205
Item number: 96363_317000
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
1-877-871-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Emergency telephone:
860.571.5100
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	paste	HMS:	
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:	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. 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	80 - 100
Silicon carbide	409-21-2	5 - 10
N-Aminoethylpiperazine	140-31-8	5 - 10
4,4'-Isopropylidenediphenol	80-05-7	5 - 10
Nonylphenol	25154-52-3	1 - 5
Triethanolamine	102-71-6	1 - 5
Diethylenetriamine	111-40-0	1 - 5
Aliphatic amine	Proprietary	1 - 5

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:	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) Pensky Martens 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. Avoid contact with eyes, skin and clothing. Avoid breathing dust. 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.

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	0.1 FIBERS/CM3 TWA Fiber. 3 mg/m3 TWA Respirable fraction. 10 mg/m3 TWA Inhalable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
N-Aminoethylpiperazine	None	None	None	None
4,4'-Isopropylidenediphenol	None	None	None	None
Nonylphenol	None	None	None	None
Triethanolamine	5 mg/m3 TWA	None	None	None
Diethylenetriamine	(SKIN) 1 ppm TWA	None	None	None
Aliphatic amine	None	None	None	None

Engineering controls:	Use local exhaust ventilation if the potential for airborne exposure exists.
Respiratory protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
Eye/face protection:	Safety goggles or safety glasses with side shields.
Skin protection:	Chemical resistant, impermeable gloves. 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:	2.264
Vapor density:	Not available.
Flash point:	88 °C (190.4 °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:	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: Store away from incompatible materials.

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
Nonylphenol	No	No	No
Triethanolamine	No	No	No
Diethylenetriamine	No	No	No
Aliphatic amine	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
Nonylphenol	Allergen, Corrosive, Irritant, Kidney
Triethanolamine	Irritant, Allergen
Diethylenetriamine	Allergen, Irritant, Eyes
Aliphatic amine	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 3250
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 3250
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): 4,4'-Isopropylidenediphenol (CAS# 80-05-7).
California Proposition 65: This product contains a chemical known in the State of California to cause cancer.
Export Restrictions: This product is controlled for export by the United States Department of Commerce. The Export Classification Control Number (ECCN) is 1C995.a.2.a

Canada Regulatory Information

CEPA DSL/NDL 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: 1

Prepared by: Gary Pierson, Manager, Regulatory Affairs

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