

# Safety Data Sheet



Revision Number: 009.0

Issue date: 07/31/2023

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** LOCTITE PC 7230 known as Loctite(R) Nordbak(R) High Temp  
**Product type/use:** Epoxy Hardener  
**Restriction of Use:** None identified  
**Company address:** Henkel Corporation  
One Henkel Way  
Rocky Hill, Connecticut 06067

**IDH number:** 702276  
**Item number:** 99112\_231000  
**Region:** United States  
**Contact information:**  
Telephone: +1 (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 dust or fumes. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye 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 victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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*
Aluminium oxide - non fibrous form	1344-28-1	30 - 60
4,4'-Methylenebis(cyclohexylamine)	1761-71-3	10 - 30
Formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2	10 - 30
Silicon carbide	409-21-2	10 - 30

IDH number: 702276

Product name: LOCTITE PC 7230 known as Loctite(R) Nordbak(R) High Temp  
Page 1 of 8

Silica, amorphous, fumed, cryst.-free	112945-52-5	1 - 5
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	1 - 5
Calcium carbonate	471-34-1	1 - 5
Silicon dioxide, crystalline	7631-86-9	1 - 5
Magnesium oxide	1309-48-4	1 - 5
Calcium oxide	1305-78-8	1 - 5
Quartz (SiO <sub>2</sub> ), <1% respirable	14808-60-7	0.1 - 1

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

## 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Skin contact:</b>	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.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get immediate medical attention.
<b>Symptoms:</b>	See Section 11.

## 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
<b>Unusual fire or explosion hazards:</b>	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.
<b>Hazardous combustion products:</b>	Oxides of carbon. Oxides of nitrogen. Irritating organic fragments. Ammonia. Hydrogen cyanide. Metal oxide fumes. Irritating organic vapours.

## 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	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. Scrape up as much material as possible. Store in a closed container until ready for disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Use only with adequate ventilation. Do not taste or swallow. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Refer to Section 8. Keep container closed.
<b>Storage:</b>	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.

## 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
Aluminium oxide - non fibrous form	1 mg/m3 TWA Respirable fraction. 3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 50 MPPCF TWA Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
4,4'-Methylenebis(cyclohexylamine)	None	None	None	None
Formaldehyde, polymer with benzenamine, hydrogenated	None	None	None	None
Silicon carbide	3 mg/m3 TWA Respirable fraction. 10 mg/m3 TWA Inhalable fraction. 0.1 FIBERS/CM3 TWA Fiber. 3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 5 mg/m3 TWA Respirable fraction. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust.	None	None
Silica, amorphous, fumed, cryst.-free	3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	20 MPPCF TWA 0.8 mg/m3 TWA 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. 15 MPPCF TWA Respirable fraction.	None	None
2,4,6-tris(dimethylaminomethyl)phenol	None	None	None	None
Calcium carbonate	10 mg/m3 TWA Total dust. 3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	15 mg/m3 PEL Total dust. 5 mg/m3 PEL Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 15 MPPCF TWA Respirable fraction. 5 mg/m3 TWA Respirable fraction.	None	None
Silicon dioxide, crystalline	3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles. 6 mg/m3 TWA	15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction. 20 MPPCF TWA 0.8 mg/m3 TWA	None	None

Magnesium oxide	10 mg/m3 TWA Inhalable fraction.	15 mg/m3 PEL Total particulate. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. 15 MPPCF TWA Respirable fraction.	None	None
Calcium oxide	2 mg/m3 TWA	5 mg/m3 PEL	None	None
Quartz (SiO <sub>2</sub> ), <1% respirable	0.025 mg/m3 TWA Respirable fraction.	0.05 mg/m3 TWA (Respirable dust.) (Respirable dust.) 0.025 mg/m3 OSHA_ACT (Respirable dust.) 0.05 mg/m3 PEL Respirable dust. 2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable.	None	None

<b>Engineering controls:</b>	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
<b>Respiratory protection:</b>	Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.
<b>Eye/face protection:</b>	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.
<b>Skin protection:</b>	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Neoprene gloves. Butyl rubber gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Paste
<b>Color:</b>	Gray
<b>Odor:</b>	Slight, Ammoniacal
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not available.
<b>Vapor pressure:</b>	Not available.
<b>Boiling point/range:</b>	Not available.
<b>Melting point/ range:</b>	Not available.
<b>Specific gravity:</b>	1.7911
<b>Vapor density:</b>	> 1
<b>Flash point:</b>	121 °C (249.8 °F) Pensky Martens closed cup
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not available.
<b>Flammability:</b>	Not applicable
<b>Evaporation rate:</b>	Slower than butyl acetate.
<b>Solubility in water:</b>	Not available.
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	< 1.0 %; < 10 g/l (value for resin and hardener together) (estimated)
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions of storage and use.
<b>Hazardous reactions:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Oxides of nitrogen. Ammonia. Hydrogen cyanide. Metal oxide fumes. Nitric acid. Nitrosamines. Irritating vapors.
<b>Incompatible materials:</b>	Strong Lewis acids. Strong mineral acids. Chlorinated rubber. Reaction with epoxy resins and/or isocyanates in large amounts or under uncontrolled conditions releases considerable heat and may release acrid fumes. Nitrites. Nitrates. 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. Nitrous acid and other nitrosating agents. Organic acids. Sodium hypochlorite. This product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents. Bases.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Store away from incompatible materials. Heat, flames, sparks and other sources of ignition. Elevated temperatures.

## 11. TOXICOLOGICAL INFORMATION

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

### Potential Health Effects/Symptoms

<b>Inhalation:</b>	Inhalation of vapors or mists of the product may be irritating to the respiratory system. Abrasion of cured material such as by sanding or grinding could release respirable particles of silica quartz, a cancer hazard by inhalation. Normal use of this product causes no such release.
<b>Skin contact:</b>	Corrosive to skin. Causes skin burns. May cause allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye damage. Corneal edema may give appearance of "blue haze" or "fog" around lights.
<b>Ingestion:</b>	Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract if swallowed. May cause an aspiration hazard if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Aluminium oxide - non fibrous form	Inhalation LC50 (Rat, 4 h) = > 0.888 mg/l Inhalation LC50 (Rat, 4 h) = > 2.3 mg/l	Irritant, Nuisance dust, Corrosive
4,4'-Methylenebis(cyclohexylamine)	None	Irritant, Allergen
Formaldehyde, polymer with benzenamine, hydrogenated	None	No Records
Silicon carbide	None	Nuisance dust
Silica, amorphous, fumed, cryst.-free	None	No Data
2,4,6-tris(dimethylaminomethyl)phenol	None	Irritant, Allergen
Calcium carbonate	Oral LD50 (Rat) = 6,450 mg/kg Oral LD50 (Mouse) = 6,450 mg/kg Inhalation LC50 (Rat, 4 h) = > 3 mg/l	Nuisance dust
Silicon dioxide, crystalline	Oral LD50 (Rat) = > 22,500 mg/kg Oral LD50 (Mouse) = > 15,000 mg/kg Inhalation LC50 (Rat, 4 h) = > 2.08 mg/l Inhalation LC50 (Rat, 4 h) = > 0.69 mg/l	Nuisance dust
Magnesium oxide	None	Blood, Central nervous system, Immune system, Irritant
Calcium oxide	Inhalation LC50 (Rat, 4 h) = 40 mg/m3 Inhalation LC50 (Rat, 4 h) = 160 mg/m3	Irritant, Corrosive, Eyes
Quartz (SiO2), <1% respirable	None	Immune system, Lung, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aluminium oxide - non fibrous form	No	No	No
4,4'-Methylenebis(cyclohexylamine)	No	No	No
Formaldehyde, polymer with benzenamine, hydrogenated	No	No	No
Silicon carbide	No	Group 2A	No
Silica, amorphous, fumed, cryst.-free	No	No	No
2,4,6-tris(dimethylaminomethyl)phenol	No	No	No
Calcium carbonate	No	No	No
Silicon dioxide, crystalline	No	No	No
Magnesium oxide	No	No	No
Calcium oxide	No	No	No
Quartz (SiO2), <1% respirable	Known To Be Human Carcinogen.	Group 1	Yes

## 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.

## 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any packaging.

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

**Proper shipping name:** Amines, solid, corrosive, n.o.s. (Aliphatic amines)  
**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. (Aliphatic amines)  
**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. (Aliphatic amines)  
**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 as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.  
**TSCA 12 (b) Export Notification:** None above reporting de minimis  
**CERCLA/SARA Section 302 EHS:** None above reporting de minimis.  
**CERCLA/SARA Section 311/312:** Immediate Health  
**CERCLA/SARA Section 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/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.

## 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2,3,5,8,10,11,15

**Prepared by:** Product Safety and Regulatory Affairs

**Issue date:** 07/31/2023

**DISCLAIMER:** The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

This Safety Data Sheet has been generated based on OSHA Hazard Communication Standard (29 CFR 1910.1200) and provides information in accordance with U.S. federal law only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.