Revision Number: 002.0

Issue date: 10/11/2021

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **LOCTITE PC 9599 PT B**
Product type/use: Epoxy
Restriction of Use: None identified
Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

IDH number: 2516925
Item number: 2516930_2442151
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: COMBUSTIBLE LIQUID.
CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
MAY CAUSE AN ALLERGIC SKIN REACTION.
HARMFUL IF INHALED.
MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.
MAY CAUSE RESPIRATORY IRRITATION.
SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
ACUTE TOXICITY INHALATION	4
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
REPRODUCTIVE TOXICITY	2

PICTOGRAM(S)

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces - no smoking. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection. In case of inadequate ventilation wear respiratory 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 exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. 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
Silicon carbide	409-21-2	10 - 30
N-Aminoethylpiperazine	140-31-8	5 - 10
4,4'-Isopropylidenediphenol	80-05-7	5 - 10
4-nonylphenol, branched	84852-15-3	1 - 5
Diethylenetriamine	111-40-0	1 - 5
Triethanolamine	102-71-6	1 - 5
Silicon dioxide, crystalline	7631-86-9	1 - 5
Magnesium oxide	1309-48-4	1 - 5
Calcium oxide	1305-78-8	1 - 5
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5
Quartz (SiO2), <1% respirable	14808-60-7	0.1 - 1
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	1760-24-3	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

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

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

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.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

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: Do not allow run-off from fire fighting to enter drains or water courses. Personnel in vicinity and downwind should be evacuated.

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen. Toxic fumes. Irritating vapors. Metal oxide fumes. Ammonia.

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: Ensure adequate ventilation. Wear appropriate personal protective equipment. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed.

Storage: Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away from heat, spark and flame. Store in original container until ready to use.

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
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
N-Aminoethylpiperazine	None	None	None	None
4,4'-Isopropylidenediphenol	None	None	None	None
4-nonylphenol, branched	None	None	None	None
Diethylenetriamine	1 ppm TWA (SKIN)	None	None	None
Triethanolamine	5 mg/m3 TWA	None	None	None
Silicon dioxide, crystalline	3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles. 6 mg/m3 TWA	20 MPPCF TWA 0.8 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.	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
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction. 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

Quartz (SiO2), <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
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	None	None	None	None

Engineering controls: Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

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. 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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Paste
Color: Blue
Odor: Amine
Odor threshold: Not available.
pH: Not applicable
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.
Flammability: Not applicable
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)
Viscosity: Not available.
Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing.

Hazardous decomposition products: Oxides of carbon. Oxides of nitrogen. Toxic fumes. Irritating vapors. Ammonia. Nitric acid. Nitrosamines. Aldehydes.

Incompatible materials: Acids. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Materials reactive with hydroxyl compounds. This product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Oxidizing agents. Sodium hypochlorite. 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.

Reactivity: Not available.

Conditions to avoid: Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

Inhalation: Mists, vapors or liquid may cause severe irritation or burns. May cause allergic respiratory reaction. 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. Vapors may cause headaches, nausea, dizziness and respiratory tract irritation. Dizziness.

Skin contact: Causes skin burns. May cause allergic skin reaction.

Eye contact: Causes serious eye damage.

Ingestion: If ingested, severe burns of the mouth and throat may occur, as well as perforation of the esophagus and the stomach.

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
Silicon carbide	None	Nuisance dust
N-Aminoethylpiperazine	None	Irritant, Corrosive, Allergen
4,4'-Isopropylidenediphenol	Oral LD50 (Rat) = 4,100 mg/kg Oral LD50 (Rat) = 3,300 mg/kg	Allergen, Blood, Irritant, Kidney, Reproductive, Spleen
4-nonylphenol, branched	None	Irritant, Corrosive
Diethylenetriamine	Oral LD50 (Rat) Approximate 1,140 mg/kg Oral LD50 (Rat) = 1,080 mg/kg Oral LD50 (Rat) = 2.33 g/kg	Allergen, Irritant, Eyes
Triethanolamine	Oral LD50 (Rat) = 8.0 g/kg Dermal LD50 (Rabbit) = > 20,000 mg/kg	Irritant, Allergen
Silicon dioxide, crystalline	Oral LD50 (Rat) = > 22,500 mg/kg Oral LD50 (Mouse) = > 15,000 mg/kg Inhalation LC50 (Rat, 4 h) = > 58.8 mg/l Inhalation LC50 (Rat, 4 h) = > 0.14 mg/l 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
Silica, amorphous, fumed, crystal-free	None	Nuisance dust
Quartz (SiO2), <1% respirable	None	Immune system, Lung, Some evidence of carcinogenicity
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	Inhalation LC50 (Rat, 4 h) = > 1.49 - < 2.44 mg/l	Irritant, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aluminium oxide - non fibrous form	No	No	No
Silicon carbide	No	Group 2A	No
N-Aminoethylpiperazine	No	No	No
4,4'-Isopropylidenediphenol	No	No	No
4-nonylphenol, branched	No	No	No
Diethylenetriamine	No	No	No
Triethanolamine	No	No	No
Silicon dioxide, crystalline	No	No	No
Magnesium oxide	No	No	No
Calcium oxide	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Quartz (SiO2), <1% respirable	Known To Be Human Carcinogen.	Group 1	Yes
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	No	No	No

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 package/configuration.

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

Proper shipping name:	Corrosive liquid, basic, organic, n.o.s. (N-Aminoethylpiperazine, 4-Nonylphenol Branched)
Hazard class or division:	8
Identification number:	UN 3267
Packing group:	II

International Air Transportation (ICAO/IATA)

Proper shipping name:	Corrosive liquid, basic, organic, n.o.s. (N-Aminoethylpiperazine, 4-Nonylphenol Branched)
Hazard class or division:	8
Identification number:	UN 3267
Packing group:	II

Water Transportation (IMO/IMDG)

Proper shipping name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (N-Aminoethylpiperazine, 4-Nonylphenol Branched)
Hazard class or division:	8
Identification number:	UN 3267
Packing group:	II
Marine pollutant:	4-Nonylphenol Branched

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:	Alkyl phenol (CAS# 84852-15-3).
CERCLA/SARA Section 302 EHS:	None above reporting de minimis.
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA Section 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). 4-nonylphenol, branched (CAS# 84852-15-3). Calcium oxide (CAS# 1305-78-8).
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: 2,3,8,9,10,11,15

Prepared by: Product Safety and Regulatory Affairs

Issue date: 10/11/2021

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