



Revision Number: 001.2

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Loctite® PL® Premium Polyurethane Construction Adhesive **IDH number:** 1390595
Product type: 1-component-polyurethane adhesive **Region:** United States
Company address: Henkel Corporation, One Henkel Way, Rocky Hill, Connecticut 06067
Contact information: Telephone: 800.624.7767
 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

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Highly viscous, Solid	HEALTH:	*2
Color:	Beige	FLAMMABILITY:	1
Odor:	like vegetable oil	PHYSICAL HAZARD:	1
		Personal Protection:	See MSDS Section 8

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

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

Potential Health Effects

Inhalation: As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Chronic overexposure to isocyanates has been reported to cause lung damage. Dryness of nasal passages, sore throat, cough, tightness of chest, shortness of breath. Persons suffering from allergic reactions to isocyanates should avoid contact with the product. This product may cause sensitization by inhalation and skin contact. May cause respiratory tract irritation.

Skin contact: Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals. This product may discolor the skin.

Eye contact: Contact with eyes will cause irritation.

Ingestion: Ingestion of this product may cause nausea, vomiting and diarrhea.

Existing conditions aggravated by exposure: Development of preexisting skin or lung allergy symptoms may increase. 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	%
Talc	14807-96-6	30 - 60
Methylenebis(phenylisocyanate)	101-68-8	10 - 30
Hydrocarbon C11-25 dearomatized	64742-46-7	10 - 30
Methylene bisphenyl isocyanate	26447-40-5	1 - 5
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	1 - 5

4. FIRST AID MEASURES

Inhalation:	If inhaled, immediately remove the affected person to fresh air. Immediate medical treatment necessary.
Skin contact:	Wash affected area immediately with soap and water. If symptoms develop and persist, get medical attention. Remove contaminated clothes.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
Ingestion:	Do not induce vomiting. Rinse the mouth. Drink plenty of water. Immediate medical advice necessary.
Notes to physician:	An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate. Treatment based on judgement of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

Flash point:	> 93.3 °C (> 199.94 °F) no method
Autoignition temperature:	No information available.
Flammable/Explosive limits - lower:	1.6 %
Flammable/Explosive limits - upper:	10.2 %
Extinguishing media:	Water fog. Foam Carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
Unusual fire or explosion hazards:	None known.
Hazardous combustion products:	Nitrous gases Irritating fumes. Isocyanate vapors.

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 empty into drains / surface water / ground water.
Clean-up methods:	Ensure adequate ventilation. Scrape up spilled material and place in a closed container for disposal. Wear suitable protective clothing, gloves and eye/face protection.

7. HANDLING AND STORAGE

- Handling:** Avoid contact with eyes, skin and clothing. Avoid extreme temperatures. Exposure to vapors of heated MDI can be extremely dangerous. Wash thoroughly after handling. Protect from moisture. Use only with adequate ventilation.
- Storage:** For safe storage, store between 18.3 °C (64.9 °F) and 40 °C (104°F) Avoid moisture. 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, please review labels on container or check the Technical Data Sheet.

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
Talc	2 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.	None	50 ppm
Methylenebis(phenylisocyanate)	0.005 ppm TWA	0.02 ppm (0.2 mg/m3) Ceiling	None	None
Hydrocarbon C11-25 dearomatized	5 mg/m3 TWA Inhalable fraction.	5 mg/m3 PEL Mist.	None	None
Methylene bisphenyl isocyanate	None	None	None	None
Isocyanic acid, polymethylenepolyphenylene ester	0.005 ppm TWA	0.02 ppm (0.2 mg/m3) Ceiling	None	None
Quartz (SiO ₂)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.	None	None

- Engineering controls:** Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.
- Respiratory protection:** Observe OSHA regulations for respirator use (29 CFR 1910.134). Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists. Respirator with combination filter for vapor/particulate. However, due to the poor warning properties of MDI, proper fit and timely replacement of filter elements must be ensured.
- Eye/face protection:** Safety glasses with side-shields. Full face protection should be used if the potential for splashing or spraying of product exists.
- Skin protection:** Suitable protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state:** Highly viscous, Solid
- Color:** Beige
- Odor:** like vegetable oil
- Odor threshold:** Not available.
- pH:** Neutral
- Vapor pressure:** Not available.
- Boiling point/range:** 172 - 341 °C (341.6 - 645.8 °F) no method

Melting point/ range:	Not applicable
Specific gravity:	1.2600
Vapor density:	Heavier than air
Flash point:	> 93.3 °C (> 199.94 °F) no method
Flammable/Explosive limits - lower:	1.6 %
Flammable/Explosive limits - upper:	10.2 %
Autoignition temperature:	No information available.
Evaporation rate:	Not available.
Solubility in water:	Slightly soluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	3.5 %; 45 g/l (by weight, calculated using CARB method; g/L less water, less exemptions calculated using SCAQMD method)

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Contact with moisture, other materials that react with isocyanates, or temperatures above 350° F (177° C), may cause polymerization.
Hazardous decomposition products:	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. nitrogen oxides Aromatic isocyanates. carbon oxides.
Incompatible materials:	Oxidizing agents. Alcohols. Water.
Conditions to avoid:	Avoid moisture. Keep away from open flames, hot surfaces and sources of ignition. Prolonged exposure to heat.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Talc	No	Group 2B	No
Methylenebis(phenylisocyanate)	No	No	No
Hydrocarbon C11-25 dearomatized	No	No	No
Methylene bisphenyl isocyanate	No	No	No
Isocyanic acid, polymethylenepolyphenylene ester	No	No	No
Quartz (SiO ₂)	Known To Be Human Carcinogen.	Group 1	No

Hazardous components	Health Effects/Target Organs
Talc	Irritant, Lung, Some evidence of carcinogenicity
Methylenebis(phenylisocyanate)	Irritant, Respiratory, Allergen
Hydrocarbon C11-25 dearomatized	Irritant
Methylene bisphenyl isocyanate	Allergen, Irritant, Mutagen, Respiratory
Isocyanic acid, polymethylenepolyphenylene ester	Allergen, Irritant, Kidney, Liver, Respiratory
Quartz (SiO ₂)	Immune system, Lung, 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:	Dispose of according to Federal, State and local governmental regulations.
Hazardous waste number:	It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

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

Proper shipping name:	Environmentally hazardous substances, solid, n.o.s.
Hazard class or division:	9
Identification number:	UN 3077
Packing group:	III
DOT Reportable quantity:	Methylene diphenyl diisocyanate

International Air Transportation (ICAO/IATA)

Proper shipping name:	Environmentally hazardous substance, solid, n.o.s.
Hazard class or division:	9
Identification number:	UN 3077
Packing group:	III

Water Transportation (IMO/IMDG)

Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Hazard class or division:	9
Identification number:	UN 3077
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 minimis
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). Methylenebis(phenylisocyanate) (CAS# 101-68-8). Isocyanic acid, polymethylenepolyphenylene ester (CAS# 9016-87-9).
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:	D.2.A, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

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