



Revision Number: 000.0

Issue date: 03.26.2010

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** Loctite PL Premium Advanced Polyurethane Adhesive  
**Product type:** 1-component-polyurethane adhesive  
**Company address:** Henkel Corporation  
 32150 Just Imagine Drive  
 Avon, Ohio 44011  
**IDH number:** 1417170  
**Region:** United States  
**Contact information:**  
 Telephone: 800.624.7767  
 Emergency telephone: 800.424.9300

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

<b>Physical state:</b>	Viscous	<b>HMIS:</b>	
<b>Color:</b>	Grey	<b>HEALTH:</b>	*2
<b>Odor:</b>	Aromatic, Mild	<b>FLAMMABILITY:</b>	1
		<b>PHYSICAL HAZARD:</b>	1
		<b>Personal Protection:</b>	Not available

**WARNING:** MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.  
 CAUSES SKIN IRRITATION  
 CAUSES RESPIRATORY TRACT IRRITATION.  
 This product may be severely irritating to the eyes.  
 CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

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

**Potential Health Effects**

**Inhalation:** Contains crystalline silica (quartz), which is classified as a possible carcinogen. However, the crystalline silica present in this product is encapsulated in the liquid and will only be liberated if the product is sanded or abraded, and even then what is liberated will not be pure crystalline silica. Appropriate precautions, however, should be taken if the product is sanded or abraded to prevent personnel from breathing the dust. May cause sensitization by inhalation and skin contact. Moderate respiratory tract irritation. Exposure to diisocyanates may cause the following human health effects: Skin irritation and allergic reactions, respiratory irritation, respiratory sensitization and lung toxicity; some diisocyanates also may cause cancer. The likelihood that these effects will occur depends on a number of factors; among them the level of exposure, frequency of exposure, part of body exposed and sensitivity of the exposed individual. Persons suffering from allergic reactions to isocyanates should avoid contact with the product.

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

**Eye contact:** Causes eye irritation.

**Ingestion:** Do not taste or swallow.

**Existing conditions aggravated by exposure:** Pre-existing skin or lung allergies may increase the chance of developing exaggerated allergic symptoms from exposure to this product.

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	%
Methylenebis(phenylisocyanate)	101-68-8	10 - 30
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	5 - 10
Methylene bisphenyl isocyanate	26447-40-5	1 - 5
Calcium oxide	1305-78-8	1 - 5
Quartz (SiO <sub>2</sub> )	14808-60-7	0.1 - 1
Titanium dioxide	13463-67-7	0.1 - 1

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If symptoms persist, seek medical advice.
<b>Skin contact:</b>	Wash affected area immediately with soap and water. If symptoms develop and persist, get medical attention. Remove contaminated clothes.
<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	Do not induce vomiting, seek medical advice immediately.
<b>Notes to physician:</b>	There is no specific antidote. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate. The physician's judgment should be used to control symptoms and clinical condition based on the individual reactions of the patient.

### 5. FIRE FIGHTING MEASURES

<b>Flash point:</b>	not applicable
<b>Autoignition temperature:</b>	Not available
<b>Flammable/Explosive limits - lower:</b>	Not available
<b>Flammable/Explosive limits - upper:</b>	Not available
<b>Extinguishing media:</b>	Not available
<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>	Fumes and vapors from thermal decompositions vary in composition and toxicity.
<b>Hazardous combustion products:</b>	Not available

### 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 empty into drains / surface water / ground water.
<b>Clean-up methods:</b>	Ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection.

## 7. HANDLING AND STORAGE

**Handling:** Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Avoid extreme temperatures. Use only with adequate ventilation. See advice in chapter 8

**Storage:** For safe storage, store at or above 20 °C (68°F)  
Below temperature limit the product properties will change. Keep container closed. Keep in a cool, well ventilated area.

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
Methylenebis(phenylisocyanate)	0.005 ppm TWA	0.02 ppm (0.2 mg/m3) Ceiling <sup>1</sup>	None	None
Diphenylmethane-diisocyanate, isomers and homologues	None	None	None	None
Methylene bisphenyl isocyanate	None	None	None	None
Calcium oxide	2 mg/m3 TWA	5 mg/m3 TWA	None	None
Quartz (SiO <sub>2</sub> )	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
Titanium dioxide	10 mg/m3 TWA	15 mg/m3 TWA Total dust.	None	None

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

**Respiratory protection:** In such cases, or whenever concentrations of MDI exceed the TLV, respiratory protection must be worn. If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH.

**Eye/face protection:** Safety glasses with side-shields.

**Skin protection:** Suitable protective clothing

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Viscous
<b>Color:</b>	Grey
<b>Odor:</b>	Aromatic, Mild
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	Not available
<b>Boiling point/range:</b>	Not available
<b>Melting point/ range:</b>	Not available
<b>Specific gravity:</b>	1.3000 at 23.89 °C (75°F) Approximately
<b>Vapor density:</b>	Not available
<b>Flash point:</b>	not applicable
<b>Flammable/Explosive limits - lower:</b>	Not available
<b>Flammable/Explosive limits - upper:</b>	Not available
<b>Autoignition temperature:</b>	Not available
<b>Evaporation rate:</b>	Not available
<b>Solubility in water:</b>	insoluble in water
<b>Partition coefficient (n-octanol/water):</b>	Not available

VOC content: 1.7 %; 22 g/l  
Viscosity: 18,000 mPa.s

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions of storage and use.

**Hazardous reactions:** Will not occur.

**Hazardous decomposition products:** Thermal decomposition can lead to release of irritating gases and vapors. Oxides of nitrogen. Oxides of carbon. Isocyanates.

**Incompatible materials:** Water. Alcohols. Strong bases. Oxidizing agents.

**Conditions to avoid:** Moisture.

## 11. TOXICOLOGICAL INFORMATION

**Acute dermal product toxicity:** May cause sensitization by skin contact.

**Acute inhalation product toxicity:** May cause sensitization by inhalation., Irritating to respiratory system

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Methylenebis(phenylisocyanate)	No	No	No
Diphenylmethane-diisocyanate, isomers and homologues	No	No	No
Methylene bisphenyl isocyanate	No	No	No
Calcium oxide	No	No	No
Quartz (SiO <sub>2</sub> )	Known carcinogen.	Group 1	No
Titanium dioxide	No	Group 2B	No

Hazardous components	Health Effects/Target Organs
Methylenebis(phenylisocyanate)	Irritant, Respiratory, Allergen
Diphenylmethane-diisocyanate, isomers and homologues	Allergen, Irritant, Kidney, Liver, Respiratory
Methylene bisphenyl isocyanate	Allergen, Irritant, Mutagen, Respiratory
Calcium oxide	Irritant, Corrosive, Eyes
Quartz (SiO <sub>2</sub> )	Immune system, Lung, Some evidence of carcinogenicity
Titanium dioxide	Irritant, Respiratory, Some evidence of carcinogenicity

## 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:** 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.

## 14. TRANSPORT INFORMATION

### 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 minimus  
**CERCLA/SARA Section 311/312:** Acute; chronic  
**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). Methylenebis(phenylisocyanate) (CAS# 101-68-8). Diphenylmethane-diisocyanate, isomers and homologues (CAS# 9016-87-9).  
**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:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.  
**WHMIS hazard class:** None necessary.

**16. OTHER INFORMATION**

This material safety data sheet contains changes from the previous version in sections: Not available

Prepared by: Regulatory Affairs

**DISCLAIMER:** The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation 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 of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.