



Revision Number: 002.0

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**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** LOCTITE HB E202 known as PURBOND HB E202  
**Product type:** Urethane adhesive  
**Restriction of Use:** This product is for industrial use only.  
**Company address:** Henkel Corporation  
 One Henkel Way  
 Rocky Hill, Connecticut 06067

**IDH number:** 1506861

**Region:** United States

**Contact information:**  
 Telephone: (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 SKIN IRRITATION.  
 MAY CAUSE AN ALLERGIC SKIN REACTION.  
 CAUSES SERIOUS EYE IRRITATION.  
 FATAL IF INHALED.  
 MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.  
 CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY INHALATION	1
SKIN IRRITATION	2
EYE IRRITATION	2A
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves. Wear respiratory protection.

**Response:** IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Immediately call a poison control center or physician. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. If experiencing respiratory symptoms: Call a poison center or physician. Take off contaminated clothing.

**Storage:** Store in a well-ventilated place. Keep container tightly closed. 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*
CP polym. MDI, Amine, PG & PO	Proprietary	30 - 60
Methylenebis(phenylisocyanate)	101-68-8	10 - 30
Polymeric diphenylmethane diisocyanate	9016-87-9	10 - 30
Isocyanate terminated polymer	Proprietary	10 - 30
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	10 - 30
o-(p-Isocyanatobenzyl)phenyl isocyanate	5873-54-1	1 - 5
Bentonite, organo-modified	Proprietary	1 - 5

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If not breathing, give artificial respiration. Seek medical advice.
<b>Skin contact:</b>	Wash affected area immediately with soap and water. Immediately remove soiled or soaked clothing. Seek medical advice.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical advice.
<b>Ingestion:</b>	If material is ingested, immediately contact a physician or poison control center. DO NOT induce vomiting unless directed to do so by medical personnel.
<b>Symptoms:</b>	See Section 11.
<b>Notes to physician:</b>	Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with isocyanates.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Use extinguishing measures appropriate to local circumstances and the surrounding environment. 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>	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

**Hazardous combustion products:**

Isocyanate vapors. Acrid smoke and fumes. Oxides of carbon.

## 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. Follow all local, state, federal and provincial regulations for disposal.

**Clean-up methods:**

Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Small spills can be absorbed with vermiculite, clay or other suitable non-biodegradable absorbent material, scooped up and placed in containers. For large spills dike ahead and collect liquid.

## 7. HANDLING AND STORAGE

**Handling:**

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling.

**Storage:**

For safe storage, store between 55 °F (12.8 °C) and 75 °F (23.9 °C) Below temperature limit the product properties will change. Above temperature limit the product properties change. Very sensitive against humidity. Store original or opened drums absolutely dry and always close it air-tight. Keep the container tightly closed and in a cool, well-ventilated place. Do not reuse container. Do not let moisture contaminate this material. Product reacts with water to release carbon dioxide, which could build up pressure in closed containers and lead to bursting. Do not reseal if moisture contamination is suspected.

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 Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
CP polym. MDI, Amine, PG & PO	None	None	None	None
Methylenebis(phenylisocyanate)	0.005 ppm TWA	0.02 ppm (0.2 mg/m <sup>3</sup> ) Ceiling	None	None
Polymeric diphenylmethane diisocyanate	0.005 ppm TWA	0.02 ppm (0.2 mg/m <sup>3</sup> ) Ceiling	None	None
Isocyanate terminated polymer	None	None	None	None
Isocyanic acid, polymethylenepolyphenylene ester	0.005 ppm TWA	0.02 ppm (0.2 mg/m <sup>3</sup> ) Ceiling	None	None
o-(p-Isocyanatobenzyl)phenyl isocyanate	None	None	None	None
Bentonite, organo-modified	None	None	None	None

**Engineering controls:**

Work should be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the PEL and other relevant standards). Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination. Monitoring of airborne isocyanates in the breathing zone of individuals should become part of the overall employee exposure characterization program. Once a person is diagnosed as sensitized to an isocyanate, no further exposure can be permitted.

<b>Respiratory protection:</b>	Do not inhale vapors and fumes. A positive pressure, supplied-air respirator or a self-contained breathing apparatus is recommended when: airborne concentrations of isocyanate are known to exceed 0.005 ppm; operations are performed in a confined space or area with limited ventilation; material is heated or sprayed. Use NIOSH approved respirator if there is potential to exceed exposure limit(s). Observe OSHA regulations for respirator use (29 CFR 1910.134).
<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. Do not wear contact lenses.
<b>Skin protection:</b>	Use impermeable gloves and protective clothing as necessary to prevent skin contact. The workplace should be equipped with an emergency shower and eye-rinsing facility.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Amber
<b>Odor:</b>	Characteristic
<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>Vapor density:</b>	Not available.
<b>Flash point:</b>	No flash point up to 200 °C
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Not available.
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	Not available.
<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>	Will not occur.
<b>Hazardous decomposition products:</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Hydrogen cyanide.
<b>Incompatible materials:</b>	Reacts with water: generation of heat.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Avoid moisture. Prolonged heating at temperatures above 150 °C.

## 11. TOXICOLOGICAL INFORMATION

<b>Relevant routes of exposure:</b>	Skin, Eyes, Lungs
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### Potential Health Effects/Symptoms

**Inhalation:** May cause allergic skin and respiratory tract reaction. 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.

**Skin contact:** Repeated or prolonged skin contact may result in allergic sensitization. May cause skin irritation.

**Eye contact:** Liquid or vapor can cause moderate to severe irritation.

**Ingestion:** Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
CP polym. MDI, Amine, PG & PO	None	No Records
Methylenebis(phenylisocyanate)	Inhalation LC50 (RAT, 4 h) = 0.38 mg/l Inhalation LC50 (RAT, 4 h) = 0.369 mg/l	Irritant, Respiratory, Allergen
Polymeric diphenylmethane diisocyanate	None	Allergen, Irritant, Kidney, Liver, Respiratory
Isocyanate terminated polymer	None	No Records
Isocyanic acid, polymethylenepolyphenylene ester	None	Allergen, Irritant, Kidney, Liver, Respiratory
o-(p-Isocyanatobenzyl)phenyl isocyanate	None	Allergen, Irritant, Respiratory
Bentonite, organo-modified	None	No Records

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
CP polym. MDI, Amine, PG & PO	No	No	No
Methylenebis(phenylisocyanate)	No	No	No
Polymeric diphenylmethane diisocyanate	No	No	No
Isocyanate terminated polymer	No	No	No
Isocyanic acid, polymethylenepolyphenylene ester	No	No	No
o-(p-Isocyanatobenzyl)phenyl isocyanate	No	No	No
Bentonite, organo-modified	No	No	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** No data available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** This product is not a RCRA hazardous waste when discarded. Processing, use, or contamination of this product may change the hazard classification and waste management options. Follow all local, state, federal and provincial regulations for disposal.

**Hazardous waste number:** Not a RCRA hazardous waste.

## 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:** RQ, Environmentally hazardous substances, liquid, n.o.s.  
**Hazard class or division:** 9  
**Identification number:** UN 3082  
**Packing group:** III  
**DOT Hazardous Substance(s):** Methylene diphenyl diisocyanate, Methylene diphenyl diisocyanate

**International Air Transportation (ICAO/IATA)**

**Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard class or division:** 9  
**Identification number:** UN 3082  
**Packing group:** III

**Water Transportation (IMO/IMDG)**

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Hazard class or division:** 9  
**Identification number:** UN 3082  
**Packing group:** III

<b>15. REGULATORY INFORMATION</b>
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**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). Polymeric diphenylmethane diisocyanate (CAS# 9016-87-9). Isocyanic acid, polymethylenepolyphenylene ester (CAS# 9016-87-9).

**CERCLA Reportable quantity:** Isocyanic acid, polymethylenepolyphenylene ester (CAS# 9016-87-9) 5,000 lbs. (2,270 kg)

**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.

<b>16. OTHER INFORMATION</b>
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**This safety data sheet contains changes from the previous version in sections:** New Safety Data Sheet format.

**Prepared by:** C. Poulsen, Regulatory Affairs

**Issue date:** 11/19/2014

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