



Revision Number: 002.1

Issue date: 03/29/2011

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** TECHNOMELT PUR 508 known as PURMELT R-508  
**Product type:** 1-component-polyurethane adhesive  
**Company address:** Henkel Corporation  
 10 FINDERNE AVENUE, SUITE B  
 BRIDGEWATER, NEW JERSEY 08807

**IDH number:** 840433  
**Region:** United States  
**Contact information:**  
 Customer Service: 1-888-480-6889  
 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

<b>Physical state:</b>	solid	<b>HEALTH:</b>	*2
<b>Color:</b>	white	<b>FLAMMABILITY:</b>	1
<b>Odor:</b>	Characteristic	<b>PHYSICAL HAZARD:</b>	0
		<b>Personal Protection:</b>	See MSDS Section 8

**WARNING:** CAUSES EYE IRRITATION.  
 MAY CAUSE RESPIRATORY TRACT IRRITATION.  
 MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.  
 MAY CAUSE LUNG DAMAGE.  
 MOLTEN ADHESIVE MAY CAUSE SEVERE BURNS.

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

### Potential Health Effects

**Inhalation:** Methylene bisphenyl isocyanate (MDI) vapors or mist at concentrations above the TLV can irritate the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). This product may cause sensitization by inhalation and skin contact. Repeated exposure may lead to respiratory sensitization reactions, producing an asthma-like condition.

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

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

**Ingestion:** Harmful if swallowed. Not expected under normal conditions of use.

**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	1 - 5

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration.
<b>Skin contact:</b>	Cool melted product on skin with plenty of water. Do not remove solidified product. Immediately wash skin thoroughly with soap and water. Get immediate medical attention.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Continue to flush eyes while awaiting medical attention
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Seek medical advice.
<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>Flash point:</b>	> 200 °C (> 392°F) Cleveland open cup
<b>Autoignition temperature:</b>	Not determined
<b>Flammable/Explosive limits - lower:</b>	not applicable
<b>Flammable/Explosive limits - upper:</b>	not applicable
<b>Extinguishing media:</b>	water, carbon dioxide, foam, powder
<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>	None
<b>Hazardous combustion products:</b>	In the event of a fire, carbon monoxide (CO), carbon dioxide (CO <sub>2</sub> ) and nitrogen oxides (NO <sub>x</sub> ) can be released. Irritating and toxic gases or fumes may be released during a fire. Hydrogen cyanide.

#### 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>	Keep unnecessary personnel away. Wear protective clothing, gloves and safety glasses. If product is spilled in the solid state, pick up and place in an appropriate waste disposal container. If product is spilled in the molten state, allow product to solidify before scraping up and disposing of in an appropriate waste disposal container.

#### 7. HANDLING AND STORAGE

<b>Handling:</b>	Do not place wet or damp solid into melt tank. Avoid skin and eye contact. Avoid breathing vapors or mists of this product. Wash thoroughly after handling.
<b>Storage:</b>	Store in tightly closed containers to prevent moisture contamination. Reacts slowly with water to liberate carbon dioxide gas. Do not store above 100 °F (37.7 °C).

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/m <sup>3</sup> ) Ceiling	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 below occupational exposure limits.

### Respiratory protection:

No personal respiratory protective equipment normally required. Do not inhale vapors and fumes. Concentrations greater than the TLV can occur when MDI is sprayed, heated or used in a poorly ventilated area. 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. Observe OSHA regulations for respiratory use (29 CFR 1910.134).

### Eye/face protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. Full face protection should be used if the potential for splashing or spraying of product exists.

### Skin protection:

Use impermeable gloves and protective clothing as necessary to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	solid
Color:	white
Odor:	Characteristic
Odor threshold:	Not available
pH:	Not applicable
Vapor pressure:	Not available
Boiling point/range:	Not available
Melting point/ range:	65 °C (149°F) (Softening Point)
Specific gravity:	1.2
Vapor density:	Not determined
Flash point:	> 200 °C (> 392°F) Cleveland open cup
Flammable/Explosive limits - lower:	not applicable
Flammable/Explosive limits - upper:	not applicable
Autoignition temperature:	Not determined
Evaporation rate:	Not applicable
Solubility in water:	Not soluble. Reacts slowly with water to liberate carbon dioxide gas.
Partition coefficient (n-octanol/water):	Not applicable
VOC content:	0 g/l
Viscosity:	7,500 - 11,500 cp

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Thermal decomposition can lead to release of irritating gases and vapors. Hydrogen cyanide. Oxides of carbon. Oxides of nitrogen.
<b>Incompatible materials:</b>	Reacts with alcohols and amines. Reacts slowly with water to liberate carbon dioxide gas.
<b>Conditions to avoid:</b>	Container can be pressurised by carbon dioxide due to reaction with humid air and/or water.

## 11. TOXICOLOGICAL INFORMATION

**Acute oral product toxicity:** No information available.

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Methylenebis(phenylisocyanate)	No	No	No

Hazardous components	Health Effects/Target Organs
Methylenebis(phenylisocyanate)	Irritant, Respiratory, Allergen

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Not 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. Dispose of according to Federal, State and local governmental regulations.

**Hazardous waste number:** Not hazardous.

## 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
Exceptions:	None

## 15. REGULATORY INFORMATION

### United States Regulatory Information

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
<b>TSCA 12(b) Export Notification:</b>	None above reporting de minimus
<b>CERCLA/SARA Section 302 EHS:</b>	None above reporting de minimus
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health, Delayed Health
<b>CERCLA/SARA 313:</b>	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).
<b>California Proposition 65:</b>	No California Proposition 65 listed chemicals are known to be present.

### Canada Regulatory Information

<b>CEPA DSL/NDL Status:</b>	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
<b>WHMIS hazard class:</b>	D.2.A, D.2.B

## 16. OTHER INFORMATION

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

**Prepared by:** Ed Waldynski, Regulatory Affairs Specialist

**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.