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**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b>	PURMELT QR 2580	<b>Item No. :</b>	/ IDH No. 515212
<b>Product type:</b>	Industrial Hot Melt Adhesive	<b>Region:</b>	United States
<b>Company address:</b>	Henkel Corporation 1345 Gasket Drive Elgin, IL 60120	<b>Contact Information:</b>	Telephone:847.468.9200 Transportation Emergency Telephone: 800.424.9300

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Hazardous components</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
Polyurethane Prepolymer	97-99	None	None	None
Methylene bisphenyl isocyanate 101-68-8	1-3	0.005 ppm TWA	0.02 ppm Ceiling 0.2 mg/m³ Ceiling	None

**3. HAZARDS IDENTIFICATION**

<u>EMERGENCY OVERVIEW</u>	
<b>Physical state:</b> Solid	<b>HEALTH:</b> 2*
<b>Color:</b> Off-white	<b>FLAMMABILITY:</b> 1
<b>Odor:</b> None	<b>PHYSICAL HAZARD:</b> 0
<b>WARNING:</b> MOLTEN ADHESIVE MAY CAUSE SEVERE BURNS. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.	<b>Personal Protection:</b> See Section 8

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

Potential Health Effects

<b>Inhalation:</b>	Continuous breathing of vapors above molten adhesive may irritate mucous membranes.
<b>Skin contact:</b>	May cause sensitization by inhalation and skin contact. Dusts from solid adhesive may cause irritation. Repeated or prolonged skin contact may result in allergic sensitization. Molten adhesive may cause severe burns.
<b>Eye contact:</b>	Molten adhesive in eyes will cause severe and permanent damage. Can cause mechanical irritation if dusts are generated.
<b>Ingestion:</b>	Ingestion causes irritation and effects similar to inhalation.

**Existing conditions aggravated by exposure:** None known. Pre-existing skin or lung allergies may increase the chance of developing exaggerated allergic symptoms from exposure to this product.

See Section 11 for additional toxicological information.

#### 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 breathing is difficult, give oxygen. If not breathing, give artificial respiration.
<b>Skin contact:</b>	Thermal burn hazard from molten adhesive. Cool melted product on skin with plenty of water. Do not remove solidified product. Cover affected areas with clean sheeting or gauze and seek immediate medical attention. No attempt should be made to remove material from skin or to remove contaminated clothing as damaged skin can be easily torn.
<b>Eye contact:</b>	If eye contact occurs with molten material immediately cool with water. Do not remove adhesive. Seek medical attention.
<b>Ingestion:</b>	If swallowed, seek medical advice immediately and show this container or label.

#### 5. FIRE-FIGHTING MEASURES

<b>Flash point:</b>	Greater than 232°C (450°F)
<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>	Use extinguishing measures appropriate to local circumstances and the surrounding environment. Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special fire fighting 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>	Oxides of carbon. Hydrogen cyanide. Isocyanate vapors. Thermal decomposition can lead to release of irritating gases and vapors. Acrid smoke and fumes.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Environmental precautions:</b>	No special environmental precautions required. Do not allow material to contaminate ground water system.
<b>Clean-up methods:</b>	If product is molten at time of spill, allow it to polymerize before scraping up. If product is solid at time of spill, sweep up. Avoid creating static electricity while sweeping as static discharge may occur. Store picked up product for either reuse or disposal. Ensure adequate ventilation. Keep in suitable and closed containers for disposal.

#### 7. HANDLING AND STORAGE

<b>Handling:</b>	Avoid contact with molten material. Always be careful around molten material. Do not place wet or damp solid into melt tank. Follow suggested application temperature. Do not wear contact lenses.
<b>Storage:</b>	Do not store above 38°C (100°F).
<b>Incompatible products:</b>	No special restrictions on storage with other products.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering controls:</b>	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. Heat only in areas with appropriate exhaust ventilation.
<b>Respiratory protection:</b>	Respirator with combination filter for vapour/particulate. In case of insufficient ventilation wear suitable respiratory equipment. Observe OSHA regulations for respiratory use (29 CFR 1910.134).

**Skin protection:** Insulated gloves and long sleeved clothing are strongly recommended when working with molten adhesive.

**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. Do not wear contact lenses when handling this product.

See Section 2 for exposure limits.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Solid  
**Color:** Off-white  
**Odor:** None  
**Odor Threshold:** 0.4 ppm (4,4'-MDI)  
**Vapor pressure:** < 0.0001 mmHg @20°C (68° F) For MDI  
**pH:** Not applicable  
**Boiling point/range:** Not available  
**Melting point/range:** 120°C (250°F)  
**Specific gravity:** 1.1  
**Vapor density:** Not available  
**Evaporation rate:** Not applicable  
**Solubility in water:** Insoluble. Reacts slowly with water to liberate carbon dioxide gas.  
**Partition coefficient (n-octanol/water):** Not available  
**VOC content:** 0 g/L

## 10. STABILITY AND REACTIVITY

**Stability:** Stable.

**Hazardous polymerization:** Will not occur.

**Hazardous decomposition products:** None under normal use.

**Incompatibility:** Humid air and/or water will produce carbon dioxide which will pressurise the container.

**Conditions to avoid:** Container can be pressurised by carbon dioxide due to reaction with humid air and/or water.

## 11. TOXICOLOGICAL INFORMATION

**Product toxicity data:** Toxicity data for monomeric and polymeric methylene bisphenyl isocyanate:  
 Acute LD50 (dermal): More than > 10,000 mg/kg (rabbit). Acute LD50 (oral): > 10,000 mg/kg (rat).

### Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Polyurethane Prepolymer	No	No	No
Methylene bisphenyl isocyanate 101-68-8	No	No	No

### Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
Polyurethane Prepolymer	No data
Methylene bisphenyl isocyanate 101-68-8	Allergen, Irritant, Respiratory

## 12. ECOLOGICAL INFORMATION

**Ecological information:** For both polymeric and monomeric MDI:  
 Aquatic toxicity - LC50 - 24 hour (static): greater than 500 mg/l for Daphnia magna, Limnea stagnalis, and Zebra fish (Brachydanio rerio).

### 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.

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

### 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  
**Marine pollutant:** 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.

**CERCLA/SARA Section 302 EHS:** None above reporting de minimus.  
**CERCLA/SARA Section 311/312:** Immediate Health Hazard, Delayed Health Hazard  
**CERCLA/SARA 313:** Methylene bisphenyl isocyanate (CAS# 101-68-8).

**California Proposition 65:** No California Proposition 65 listed chemicals are known to be present.

**Canada Regulatory Information**

**CEPA DSL/NDSL Status:** All components are listed on or are exempt from listing on the Domestic Substances List.  
**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 Material Safety Data Sheet format.

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

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