



Revision No.: 001.0

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**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b>	MIRACURE UVM2020D BULK	<b>IDH number:</b>	1148916
<b>Product type:</b>	Not available	<b>Item number:</b>	UVM2020D
		<b>Region:</b>	United States
<b>Company address:</b>	<b>Contact information:</b>		
Henkel Corporation	Telephone: 860.571.5100		
1001 Trout Brook Crossing	Emergency telephone: 860.571.5100		
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**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

<b>Physical state:</b>	Liquid	<b>HEALTH:</b>	*2
<b>Color:</b>	opaque, off white	<b>FLAMMABILITY:</b>	0
<b>Odor:</b>	amine-like	<b>PHYSICAL HAZARD:</b>	2
		<b>Personal Protection:</b>	See MSDS Section 8

**WARNING:** CONTAINER MAY EXPLODE IF HEATED.  
HARMFUL IF SWALLOWED.  
MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.  
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

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

**Potential Health Effects**

<b>Inhalation:</b>	May cause allergic respiratory reaction. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. May cause respiratory tract irritation.
<b>Skin contact:</b>	Repeated or prolonged skin contact may result in allergic sensitization. Once sensitized, an individual may react even to airborne levels below the TLV with the following symptoms: itching and tingling of the earlobes and neck, rash, hives, swelling of the arms and legs or other symptoms common to allergic dermatitis. Prolonged or repeated contact may cause irritation. May cause severe irritation due to defatting of skin.
<b>Eye contact:</b>	This product may be severely irritating to the eyes. May cause corneal injury.
<b>Ingestion:</b>	Harmful if swallowed. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Existing conditions aggravated by exposure:** Skin allergies., Respiratory allergies.

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

<b>Hazardous components</b>	<b>CAS-No.</b>	<b>%</b>
Diacrylate ester	Proprietary	10 - 30
Filler	Proprietary	10 - 30
Isodecyl acrylate	1330-61-6	10 - 30
Photoinitiator	Proprietary	5 - 10
Polyester Acrylate	Proprietary	5 - 10
Acrylated amine	Proprietary	1 - 5
oxybis(methyl-2,1-ethanediyl) diacrylate	57472-68-1	1 - 5
Photoinitiator	Proprietary	1 - 5
Polyester acrylate	Proprietary	1 - 5
Acrylate ester	Proprietary	1 - 5
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	75980-60-8	1 - 5
1,6-Hexanediol diacrylate	13048-33-4	1 - 5

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. Get immediate medical attention.
<b>Skin contact:</b>	Immediately wash skin thoroughly with soap and water. Remove contaminated clothing and footwear. Get immediate medical attention.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical attention.
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get immediate medical attention.

### 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>	Use media appropriate for surrounding material.
<b>Special firefighting procedures:</b>	Keep unnecessary personnel away. 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. Uncontrolled polymerization may cause rapid evolution of heat and increase in pressure that could result in violent rupture of sealed storage vessels or containers.
<b>Hazardous combustion products:</b>	Oxides of carbon. Acrid smoke and fumes.

### 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>	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Do not allow product to enter sewer or waterways.
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**Clean-up methods:**

Keep unnecessary personnel away. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up. Dispose of contaminated material as waste according to item 13.

## 7. HANDLING AND STORAGE

**Handling:**

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. Keep away from heat, spark and flame.

**Storage:**

For safe storage, store between 5 °C (41°F) and 33 °C (91.4 °F)

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

## 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.

<u>Hazardous components</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>AIHA WEEL</u>	<u>OTHER</u>
Diacrylate ester	None	None	None	None
Filler	2 mg/m <sup>3</sup> TWA	20 MPPCF TWA 2.4 MPPCF TWA 0.1 mg/m <sup>3</sup> TWA 0.3 mg/m <sup>3</sup> TWA	None	50 ppm
Isoodecyl acrylate	None	None	None	None
Photoinitiator	None	None	None	None
Polyester Acrylate	None	None	None	None
Acrylated amine	None	None	None	None
oxybis(methyl-2, 1-ethanediyl) diacrylate	None	None	None	None
Photoinitiator	None	None	0.5 mg/m <sup>3</sup> TWA	None
Polyester acrylate	None	None	None	None
Acrylate ester	None	None	1 mg/m <sup>3</sup> TWA (SKIN)	None
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	None	None	None	None
1,6-Hexanediol diacrylate	None	None	None	None

**Engineering controls:**

Work should be done in an adequately ventilated area (i.e., ventilationsufficient to maintain concentrations below one half of the PEL andother relevant standards). Local exhaust ventilation is recommended whengeneral ventilation is not sufficient to control airborne contamination.

**Respiratory protection:**

Use NIOSH approved respirator if there is potential to exceed exposure limit(s). Observe OSHA regulations for respiratory use (29 CFR 1910.134).

**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.

**Skin protection:**

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	opaque, off white
<b>Odor:</b>	amine-like
<b>Odor threshold:</b>	Not available
<b>pH:</b>	not applicable
<b>Vapor pressure:</b>	Not determined
<b>Boiling point/range:</b>	Not determined
<b>Melting point/ range:</b>	Not available
<b>Specific gravity:</b>	1.00 - 1.04

Vapor density:	Not available
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Autoignition temperature:	Not available
Evaporation rate:	Not available
Solubility in water:	Not soluble
Partition coefficient (n-octanol/water):	Not available
VOC content:	Not available
Viscosity:	200 - 270 mPas

## 10. REACTIVITY AND STABILITY

<b>Stability:</b>	Stable under normal conditions of storage and use.
<b>Hazardous reactions:</b>	May occur upon depletion of inhibitor. Uncontrolled polymerization may cause rapid evolution of heat and increase in pressure that could result in violent rupture of sealed storage vessels or containers.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Smoke.
<b>Incompatible materials:</b>	Strong acids. Strong bases. Oxidizing agents. Copper alloys. Free radical initiators.
<b>Conditions to avoid:</b>	Extremes of temperature and direct sunlight. Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Diacrylate ester	No	No	No
Filler	No	No	No
Isodecyl acrylate	No	No	No
Photoinitiator	No	No	No
Polyester Acrylate	No	No	No
Acrylated amine	No	No	No
oxybis(methyl-2,1-ethanediyl) diacrylate	No	No	No
Photoinitiator	No	No	No
Polyester acrylate	No	No	No
Acrylate ester	No	No	No
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	No	No	No
1,6-Hexanediol diacrylate	No	No	No

Hazardous components	Health Effects/Target Organs
Diacrylate ester	Irritant, Allergen, Eyes
Filler	Irritant, Lung, Some evidence of carcinogenicity
Isodecyl acrylate	Allergen, Central nervous system, Irritant
Photoinitiator	No Records
Polyester Acrylate	No Target Organs
Acrylated amine	No Target Organs
oxybis(methyl-2,1-ethanediyl) diacrylate	No Target Organs
Photoinitiator	Blood, Kidney
Polyester acrylate	No Target Organs
Acrylate ester	Irritant, Allergen
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	No Records
1,6-Hexanediol diacrylate	Irritant, Allergen

## 12. ECOLOGICAL INFORMATION

<b>Ecological information:</b>	Not available
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### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** Legal disposition of wastes is the responsibility of the owner/generator of the waste. Applicable federal, state and/or local regulations must be followed during treatment, storage, or disposal of waste containing this product.

**Hazardous waste number:** To the best of our knowledge, this product is not listed nor does it meet the criteria of a hazardous waste if discarded in its purchased form. However, under RCRA, it is the responsibility of the user to determine at the time of disposal whether a product meets any of the RCRA hazardous waste criteria. This is because product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics under the new Toxicity Characteristics Leaching Procedure (TCLP) 40 Code of Federal Regulations 261.20-24.

### 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:** Immediate Health, Delayed Health, Reactive  
**CERCLA/SARA 313:** None above reporting de minimus.

**California Proposition 65:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**Canada Regulatory Information**

**CEPA DSL/NDL Status:** One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

**WHMIS hazard class:** D.2.A, D.2.B, F

## 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: First issue.

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