# **Material Safety Data Sheet**





CFR

#### Revision Number: 002.1

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Product type: **3942 Light Cure Medical Device** Adhesive Visible/UV Cure Fluorescent Adhesive IDH number:

434101

Item number:36483Region:United StatesContact information:Telephone:860.571.5100Emergency telephone:860.571.5100Internet:www.henkelna.com

#### **Company address:** Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

### 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW				
Dhusiaal states	Linuid	HMIS:	*0	
Physical state:	Liquid	HEALTH:	*2	
Color:	Transparent, Hazy	FLAMMABILITY:	2	
Odor:	Sharp	PHYSICAL HAZARD:	1	
		Personal Protection:	See MSDS Section 8	
WARNING:	WARNING: COMBUSTIBLE LIQUID AND VAPOR.			
	CAUSES EYE AND SKIN IRRITATION.			
	MAY CAUSE ALLERGIC SKIN REACTION.			
MAY CAUSE RESPIRATORY TRACT IRRITATION.				
MAY BE HARMFUL IF SWALLOWED.				
Relevant routes of exposure: Skin, Inhalation, Eyes				
Potential Health Effects				

Inhalation: Skin contact: Eye contact: Ingestion:	May cause respiratory tract irritation. Causes skin irritation. May cause allergic skin reaction. Vapors may irritate eyes. Contact with eyes will cause irritation. May cause gastrointestinal tract irritation if swallowed.
Existing conditions aggravated by exposure:	Eye, skin, and respiratory disorders. Acrylic acid: Respiratory disorders. Lung disease.
	This material is considered hazardous by the OSHA Hazard Communication Standard (29 0 1910.1200).

See Section 11 for additional toxicological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%	
Isobornyl acrylate	5888-33-5	30 - 60	
Polyurethane Methacrylate Resin	Proprietary	10 - 30	
2-Hydroxyethyl methacrylate	868-77-9	10 - 30	
High boiling methacrylate	7534-94-3	5 - 10	
Acrylic acid	79-10-7	5 - 10	
Hydroxyalkyl methacrylate	27813-02-1	1 - 5	
Photoinitiator	947-19-3	1 - 5	
Gamma-glycidoxypropyl trimethoxysilane	2530-83-8	1 - 5	
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	75980-60-8	1 - 5	
Ethylene glycol	107-21-1	0.1 - 1	

	4. FIRST AID MEASURES	
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.	
Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. If symptoms develop and persist, get medical attention. Wash clothing before reuse.	
Eye contact:	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.	
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Kee individual calm. Never give anything by mouth to an unconscious person. Ge medical attention.	
5. FIRE FIGHTING MEASURES		
Flash point:	70 °C (158°F) Pensky Martens closed cup	
Autoignition temperature:	Not available	

Autoignition temperature.	NOL AVAIIADIE
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Extinguishing media:	Foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Water may be unsuitable as an extinguishing media, but may be helpful in keeping adjacent containers cool.
Unusual fire or explosion hazards:	Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Oxides of silicon. Isocyanates. Hydrogen cyanide. Amines. Formaldehyde. Irritating organic vapours.

# 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.	
Clean-up methods:	Remove all sources of ignition. Ensure adequate ventilation. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.	
	7. HANDLING AND STORAGE	
Handling:	Use only with adequate ventilation. Keep away from heat, spark and flame. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. Refer to Section 8.	
Storage:	For safe storage, store at or below 38 °C (100.4 °F) Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.	

#### 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.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Isobornyl acrylate	None	None	None	None
Polyurethane Methacrylate Resin	None	None	None	None
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling1
High boiling methacrylate	None	None	None	None
Acrylic acid	2 ppm TWA (SKIN)	None	None	1 ppm TWA 3 ppm STEL (SKIN)
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
Photoinitiator	None	None	None	None
Gamma-glycidoxypropyl trimethoxysilane	None	None	None	None
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	None	None	None	None
Ethylene glycol	100 mg/m3 Ceiling1 Aerosol.	None	None	None

Engineering controls:

**Respiratory protection:** 

Eye/face protection:

Skin protection:

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.

Use impermeable gloves and protective clothing as necessary to prevent skin contact. Neoprene, Butyl-rubber, or nitrile-rubber gloves.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Liquid

Physical state: Color: Odor: Odor threshold: pH: . Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): **VOC content:** 

Transparent, Hazy Sharp Not available Not applicable < 10 mm hg (24 °C (75.2 °F)) > 149 °C (> 300.2 °F) Not available 1.1284 Not available 70 °C (158°F) Pensky Martens closed cup Not available Not available Not available Not available Slight Not available 0.79 %; 8.91 g/l ASTM D5403 Process volatiles 0.32 %; 3.61 g/l (potential) 1.10 %; 12.41 g/l (total) (ASTM D5403)

# **10. STABILITY AND REACTIVITY**

Hazardous reactions:

May occur.

Hazardous decomposition products:

Incompatible materials:

Conditions to avoid:

Stable under normal conditions of storage and use.

Oxides of carbon. Oxides of nitrogen. Oxides of silicon. Isocyanates. Hydrogen cyanide. Amines. Formaldehyde. Irritating organic vapours.

Strong oxidizing agents. Strong reducing agents. Peroxides. Heavy metals. Water. Humid air.

Heat, flames, sparks and other sources of ignition. Ultraviolet radiation. Direct sunlight. Freezing conditions. Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

Acute oral product toxicity:

LD50 (rat) > 5,000 mg/kg (Estimated)

Acute dermal product toxicity:

LD50 (rabbit) > 2,000 mg/kg (Estimated)

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	
Isobornyl acrylate	No	No	No	
Polyurethane Methacrylate Resin	No	No	No	
2-Hydroxyethyl methacrylate	No	No	No	
High boiling methacrylate	No	No	No	
Acrylic acid	No	No	No	
Hydroxyalkyl methacrylate	No	No	No	
Photoinitiator	No	No	No	
Gamma-glycidoxypropyl trimethoxysilane	No	No	No	
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	No	No	No	
Ethylene glycol	No	No	No	
Hazardous components		Health Effects/Target Organs		
Isobornyl acrylate		Irritant, Allergen		
Polyurethane Methacrylate Resin		Irritant, Allergen		
2-Hydroxyethyl methacrylate		Irritant, Allergen		

	initant, Allergen
High boiling methacrylate	Irritant, Allergen
Acrylic acid	Allergen, Corrosive, Irritant, Kidney, Liver
Hydroxyalkyl methacrylate	Irritant, Allergen
Photoinitiator	No Records
Gamma-glycidoxypropyl trimethoxysilane	Irritant, Allergen
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	No Records
Ethylene glycol	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant,
	Kidney, Liver, Metabolic

# **12. ECOLOGICAL INFORMATION**

**Ecological information:** 

Not available

# **13. DISPOSAL CONSIDERATIONS**

#### Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations. Hazardous waste number: Not a RCRA hazardous waste. **14. TRANSPORT INFORMATION** U.S. Department of Transportation Ground (49 CFR) Proper shipping name: Combustible liquid, n.o.s. (Acrylic acid) Hazard class or division: Combustible Liquid Identification number: NA 1993 Packing group: ш International Air Transportation (ICAO/IATA) Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Isobornyl acrylate) Hazard class or division: 9 Identification number: UN 3082 Packing group: ш Water Transportation (IMO/IMDG) Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate) Hazard class or division: 9 UN 3082 Identification number: Packing group: Ш Marine pollutant: Isobornyl acrylate 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: Fire, Immediate Health, Delayed Health 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). Acrylic acid (CAS# 79-10-7). California Proposition 65: This product contains a chemical known in the State of California to cause cancer. **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: B.3, 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.

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