Material Safety Data Sheet





Revision Number: 003.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Product type:

Company address:

Henkel Corporation

Rocky Hill, Connecticut 06067

One Henkel Way

363 Light Cure Adhesive Impruv® UV Cure Potting Compound Sealant IDH number:

135416

Item number:36390Region:United StatesContact information:Telephone:860.571.5100Emergency telephone:860.571.5100Internet:www.henkelna.com

2. HAZARDS IDENTIFICATION

		EMERGENCY OVERVIEW	
		HMIS:	
Physical state:	Liquid	HEALTH:	*2
Color:	Yellow	FLAMMABILITY:	1
Odor:	Sharp, Irrita	0	
		Personal Protection:	See MSDS Section 8
WARNING	••••••	USES EYE AND SKIN IRRITATION.	
	MA	Y CAUSE ALLERGIC SKIN REACTION.	
	MA	Y CAUSE RESPIRATORY TRACT IRRITATION.	
	MA	Y BE HARMFUL IF SWALLOWED OR INHALED.	
Potential Health Effe	<u>cts</u>		
Inhalatio	n:	May cause irritation to nose and throat.	
Skin con	tact:	Causes skin irritation. May cause allergic skin reaction.	
Eye cont	act:	Vapors may irritate eyes. Contact with eyes will cause irritation	
Ingestion	1:	May be harmful if swallowed. May cause gastrointestinal tract	irritation if swallowed.
Existing conditions a exposure:	aggravated by	Skin disorders. Eye disorders. Liver disorders. Kidney disorde disorders. Lung disease.	rs. Acrylic acid: Respiratory
		This material is considered hazardous by the OSHA Hazard C 1910.1200).	communication Standard (29 CF

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
2-Propenoic acid, 2-methyl-, 2-[[2,3,3a,4,7,7a(or 3a,4,5,6,7,7a)-hexahydro-4,7-methano-1H- indenyl]oxy]ethyl ester	68586-19-6	30 - 60
Polyurethane Methacrylate Resin~	Proprietary	30 - 60
Acrylic acid	79-10-7	5 - 10
2-Hydroxyethyl methacrylate	868-77-9	1 - 5
Photoinitiator	947-19-3	1 - 5
Ester Adducts	Unknown	1 - 5
Gamma-glycidoxypropyl trimethoxysilane	2530-83-8	1 - 5
Ethylene glycol	107-21-1	0.1 - 1

4	. FIRST AID MEASURES
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.
Skin contact:	Wash with soap and water. Remove contaminated clothing and footwear. Wash clothing before reuse. If symptoms develop and persist, get medical attention.
Eye contact:	Flush with copious amounts of water, preferably, lukewarm water for at leas 15 minutes, holding eyelids open all the time. Get medical attention.
Ingestion:	Do not induce vomiting. Keep individual calm. Get medical attention.
5. F	FIRE FIGHTING MEASURES
Flash point:	> 93.3 °C (> 199.94 °F) Tagliabue closed cup
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	2 % (Acrylic Acid)
Flammable/Explosive limits - upper:	8 % (Acrylic Acid)
Extinguishing media:	Foam, dry chemical or carbon dioxide. Do not use high volume water jet.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such a turn-out gear.
Unusual fire or explosion hazards:	Uncontrolled polymerization may cause rapid evolution of heat and increase pressure that could result in violent rupture of sealed storage vessels or containers.
Hazardous combustion products:	Oxides of carbon. Oxides of silicon. Formaldehyde. Ammonia. Amines. Irritating organic vapours.
6. ACCI	DENTAL RELEASE MEASURES
Jse personal protection recommended in So	ection 8, isolate the hazard area and deny entry to unnecessary and unprotec personnel.
Environmental precautions:	Do not allow product to enter sewer or waterways.

Environmental precations.	Do not allow product to enter sewer or waterways.
Clean-up methods:	Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. 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.

7. HANDLING AND STORAGE

Handling:	Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. For operations where eye or face contact could occur, provide safety shower and eyewash fountain. Refer to Section 8.
Storage:	For safe storage, store at or below 38 °C (100.4 °F) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store away from heat, sparks, flames, or other sources of ignition. Protect from direct sunlight. Keep from freezing.

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
2-Propenoic acid, 2-methyl-, 2-[[2,3,3a,4,7,7a(or 3a,4,5,6,7,7a)-hexahydro-4,7-methano-1H- indenyl]oxy]ethyl ester	None	None	None	None
Polyurethane Methacrylate Resin~	None	None	None	None
Acrylic acid	2 ppm TWA (SKIN)	None	None	1 ppm TWA 3 ppm STEL (SKIN)
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling1
Photoinitiator	None	None	None	None
Ester Adducts	None	None	None	None
Gamma-glycidoxypropyl trimethoxysilane	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.

9. PHYSICAL AND CHEMICAL PROPERTIES

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:**

Liquid Yellow Sharp, Irritating Not available Not applicable < 5 mm hg (27 °C (80.6 °F)) > 149 °C (> 300.2 °F) Not available 1.1 at 26.6 °C (79.88 °F) Not available > 93.3 °C (> 199.94 °F) Tagliabue closed cup
 2 % (Acrylic Acid) 8 % (Acrylic Acid) Not available Not available Slight Not available 2.92 %; 32.12 g/l (total) 2.14 %; 23.54 g/l ASTM D5403 Process volatiles 0.78 %; 8.58 g/l (potential)

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	None under normal processing. Polymerization may occur at elevated temperature or in the presence of incompatible materials.
Hazardous decomposition products:	Oxides of carbon. Oxides of silicon. Formaldehyde. Amines. Ammonia. Irritating organic vapours.
Incompatible materials:	Strong oxidizing agents. Reducing agents. Oxygen scavengers. Acids. Bases. Alkalis. Aldehydes. Amines. Free radical initiators. Peroxides. Aluminum.
Conditions to avoid:	Heat, flames, sparks and other sources of ignition. Exposure to sunlight. Freezing conditions. UV light. Loss of polymerization inhibitor. Inert gas blanketing. Avoid moisture.

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)
2-Propenoic acid, 2-methyl-, 2- [[2,3,3a,4,7,7a(or 3a,4,5,6,7,7a)- hexahydro-4,7-methano-1H- indenyl]oxy]ethyl ester	No	No	No
Polyurethane Methacrylate Resin~	No	No	No
Acrylic acid	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
Photoinitiator	No	No	No
Ester Adducts	No	No	No
Gamma-glycidoxypropyl trimethoxysilane	No	No	No
Ethylene glycol	No	No	No
Hazardous components		Health Effects/Targe	et Organs
2-Propenoic acid, 2-methyl-, 2-[[2,3,3a,4,7,7a 3a,4,5,6,7,7a)-hexahydro-4,7-methano-1H- indenyl]oxy]ethyl ester	or	Irritant, Allerge	en
Polyurethane Methacrylate Resin~		No Data	
Acrylic acid		Allergen, Corrosive, Irritan	t, Kidney, Liver
2-Hydroxyethyl methacrylate		Irritant, Allerge	en
Photoinitiator		No Records	

 Ester Adducts
 No Data

 Gamma-glycidoxypropyl trimethoxysilane
 Irritant, Allergen

 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:

Hazardous waste number:

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

14. TRANSPORT INFORMATION

Not a RCRA hazardous waste.

ILO Dementary and of Taxabase in the state	
U.S. Department of Transportation G Proper shipping name:	Bround (49 CFR) Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None
International Air Transportation (ICA	
Proper shipping name:	Not regulated
Hazard class or division: Identification number:	None 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
d States Regulatory Information	
TSCA 8 (b) Inventory Status: TSCA 12(b) Export Notification: CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. None above reporting de minimus None above reporting de minimus Immediate Health, Delayed Health
TSCA 8 (b) Inventory Status: TSCA 12(b) Export Notification: CERCLA/SARA Section 302 EHS:	Inventory. None above reporting de minimus None above reporting de minimus Immediate Health, Delayed Health
TSCA 8 (b) Inventory Status: TSCA 12(b) Export Notification: CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312:	Inventory. None above reporting de minimus Immediate Health, Delayed Health 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). This product contains a chemical known in the State of California to cause cancer. This
TSCA 8 (b) Inventory Status: TSCA 12(b) Export Notification: CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA 313:	Inventory. None above reporting de minimus Immediate Health, Delayed Health 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). 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 othe
TSCA 8 (b) Inventory Status: TSCA 12(b) Export Notification: CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA 313:	Inventory. None above reporting de minimus None above reporting de minimus Immediate Health, Delayed Health 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). 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 othe reproductive harm.
TSCA 8 (b) Inventory Status: TSCA 12(b) Export Notification: CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA 313: California Proposition 65:	Inventory. None above reporting de minimus None above reporting de minimus Immediate Health, Delayed Health This product contains the following toxic chemicals subject to the reporting requirements o section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Acrylic acid (CAS# 79-10-7). 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 othe reproductive harm.

This material safety data sheet contains changes from the previous version in sections: 3, 4, 5, 6, 7, 8, 10, 15

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