Safety Data Sheet

Revision Number: 001.1

Issue date: 06/29/2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **LOCTITE 3D IND3380 Black**
Product type/use: 3D Printing Resin
Restriction of Use: None identified
Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

IDH number: 2951364

Region: United States
Contact information:
Telephone: +1 (860) 571-5100
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

This product contains one or more components regulated under a Significant New Use Rule (SNUR) by the US EPA. See Section 15 for more information.

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
DANGER:	CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE DAMAGE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1

PICTOGRAM(S)

Precautionary Statements

Prevention: Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Urethane acrylate	Proprietary	10 - 30
Acrylic ester	Proprietary	10 - 30
2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H-indene-5-diyl)bis(methylene) ester	43048-08-4	10 - 30

5-methyl-3-vinyl-1,3-oxazolidin-2-one	3395-98-0	5 - 10
UV Stabilizer	Proprietary	0.1 - 1
Triacrylate ester	Proprietary	0.1 - 1
Polyglycol dimethacrylate	Proprietary	0.1 - 1
Carbon nanotubes	7440-44-0	0 - 0.1

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

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 as turn-out gear. In case of fire, keep containers cool with water spray.

Unusual fire or explosion hazards: Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers. High concentration of airborne dust may form explosive mixture with air.

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen. Irritating organic vapours. Aldehydes. Isocyanates. 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.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. 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. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed. Refer to Section 8.

Storage: Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Protect from direct sunlight. Keep away from heat, spark and flame.

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 Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Urethane acrylate	None	None	None	None
Acrylic ester	None	None	None	None
2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H-indene-5-diyl)bis(methylene) ester	None	None	None	None
5-methyl-3-vinyl-1,3-oxazolidin-2-one	None	None	None	None
UV Stabilizer	None	None	None	None
Triacrylate ester	None	None	None	None
Polyglycol dimethacrylate	None	None	None	None
Carbon nanotubes	10 mg/m3 TWA Inhalable particles. 3 mg/m3 TWA Respirable particles.	15 mg/m3 PEL Total dust. 5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 15 MPPCF TWA Respirable fraction. 5 mg/m3 TWA Respirable fraction.	None	None

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

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

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. Safety showers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Black
Odor: Acrylic
Odor threshold: Not available.
pH: Not applicable, Product is non-soluble (in water).
Vapor pressure: < 13 hPa (20 °C (68°F))
Boiling point/range: > 149 °C (> 300.2 °F) Boiling point
Melting point/ range: Not applicable, Product is a liquid
Specific gravity: 1.0 - 1.2 at 20 °C (68°F)
Vapor density: 20 °C Heavier than air
Flash point: > 93 °C (> 199.4 °F) ; No flash point up to 100 °C
Flammable/Explosive limits - lower: Not available.
Flammable/Explosive limits - upper: Not available.
Autoignition temperature: Not available.
Flammability: The product is not flammable.The product is not flammable.
Evaporation rate: Not available.
Solubility in water: Insoluble
Partition coefficient (n-octanol/water): Not available.
VOC content: 0.64 %
Viscosity: 8,000 - 10,000 mPa.s
Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: May occur. Rapid polymerization may generate excessive heat and pressure.

Hazardous decomposition products: Oxides of carbon. Oxides of nitrogen. Irritating organic vapours. Aldehydes. Isocyanates. Hydrogen cyanide.

Incompatible materials: Strong reducing agents. Free radical initiators. Inert gases. Oxygen scavengers. Strong oxidizing agents. Amines, strong alkalies Reactive metals. Peroxides. Acids and bases.

Reactivity: Not available.

Conditions to avoid: Extremes of temperature and direct sunlight. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials. UV light. Loss of dissolved air. Avoid dust formation. High concentration of airborne dust may form explosive mixture with air. Avoid moisture.

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system. Breathing high vapor concentrations may produce anesthetic effects, nausea, dizziness, headache, weakness, peripheral drowsiness.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye damage.

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Urethane acrylate	None	No Data
Acrylic ester	None	No Records
2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H-indene-5-diyl)bis(methylene) ester	None	No Data
5-methyl-3-vinyl-1,3-oxazolidin-2-one	None	No Data
UV Stabilizer	None	No Data
Triacrylate ester	None	Allergen, Irritant
Polyglycol dimethacrylate	None	Irritant, Allergen
Carbon nanotubes	Oral LD50 (Rat) = > 10,000 mg/kg	No Data

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Urethane acrylate	No	No	No
Acrylic ester	No	No	No
2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H-indene-5-diyl)bis(methylene) ester	No	No	No
5-methyl-3-vinyl-1,3-oxazolidin-2-one	No	No	No
UV Stabilizer	No	No	No
Triacrylate ester	No	No	No
Polyglycol dimethacrylate	No	No	No
Carbon nanotubes	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any packaging.

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:	Environmentally hazardous substance, liquid, n.o.s. (Dicyclopentyldimethylene dimethacrylate)
Hazard class or division:	9
Identification number:	UN 3082
Packing group:	III

Water Transportation (IMO/IMDG)

Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dicyclopentyldimethylene dimethacrylate)
Hazard class or division:	9
Identification number:	UN 3082
Packing group:	III
Marine pollutant:	Dicyclopentyldimethylene dimethacrylate

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.
TSCA 5(a) SNUR:	This product contains the following component(s) subject to a Significant New Use Rule (SNUR) by the US EPA: 2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H-indene-5-diyl)bis(methylene) ester (CAS # 43048-08-4). The SNUR is codified at Section number: 40 CFR 721.8485 5-methyl-3-vinyl-1,3-oxazolidin-2-one (CAS # 3395-98-0). The SNUR is codified at Section number: 40 CFR 40 CFR 721.11343 Carbon nanotubes (CAS # 7440-44-0). The SNUR is codified at Section number: 40 CFR 40 CFR 721.11179
TSCA 12 (b) Export Notification:	2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H-indene-5-diyl)bis(methylene) ester (CAS# 43048-08-4).Vinyl monomer (CAS# 3395-98-0).
CERCLA/SARA Section 302 EHS:	None above reporting de minimis.
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA Section 313:	None above reporting de minimis.
California Proposition 65:	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 other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL 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.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 9

Prepared by: Product Safety and Regulatory Affairs

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