Material Safety Data Sheet





Revision Number: 002.0

Henkel Electronic Materials LLC

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Product type:

Company address:

Irvine, CA 92606

14000 Jamboree Road

Loctite(R) Encap(R) 3183 Polyurethane IDH number: Hardener Polyurethane hardener

233634

39999 Item number: Region: **United States Contact information:** Telephone: 1.888.9.HENKEL (1.888.943.6535) 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

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW			
Physical state: Color: Odor:	Liquid Black Aromatic	HMIS: HEALTH: *1 FLAMMABILITY: 1 PHYSICAL HAZARD: 0 Personal Protection: See MSDS Section 8	
CAUTION:	MA	AY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.	
Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion			
Potential Health Effect	<u>s</u>		
Inhalation:May cause respiratory tract irritation.Skin contact:Prolonged or repeated contact may cause irritation.Eye contact:May cause irritation.Ingestion:Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.		Prolonged or repeated contact may cause irritation. May cause irritation.	
Existing conditions aggravated by exposure:		Eye, skin, and respiratory disorders.	
		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

Hazardous components	CAS NUMBER	%
Castor oil	8001-79-4	60 - 100
Zeolites	1318-02-1	0.1 - 1
Carbon black	1333-86-4	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 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:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.	
Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Keep individual calm. Get medical attention.	
5. FIRE FIGHTING MEASURES		
Flash point:	163 °C (325.4 °F) Closed cup	
Autoignition temperature:	Not determined	
Flammable/Explosive limits - lower:	Not determined	
Flammable/Explosive limits - upper:	Not determined	
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.	

Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
Unusual fire or explosion hazards:	Not available.
Hazardous combustion products:	Oxides of carbon. Toxic and irritating vapors.

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:	Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for 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 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, please review labels on container or check the Technical Data Sheet.

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
Castor oil	None	None	None	None
Zeolites	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction. 1 mg/m3 TWA Respirable fraction.	None	None	None
Carbon black	3.5 mg/m3 TWA 3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 TWA	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:	be used if the p	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:		esistant, impermeable suit to prevent skin co	0 00	oves and either an

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 Black Aromatic Not available. Not available. 0.2 mm hg (20 °C (68°F)) Not available. Not available. 1 3.6 (Air = 1) 163 °C (325.4 °F) Closed cup Not determined Not determined Not determined < 0.1 Soluble Not available. < 1 %; < 10 g/l (estimated value for resin and hardener mixed together)

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.	
Hazardous reactions:	None under normal processing.	
Hazardous decomposition products:	Oxides of carbon. Irritating vapors.	
Incompatible materials:	Strong oxidizing agents. Acids. Amines.	
Conditions to avoid:	Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.	

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	
Castor oil	No	No	No	
Zeolites	No	No	No	
Carbon black	No	Group 2B	No	
Hazardous components		Health Effects/Targe	et Organs	
Castor oil		Irritant		
Zeolites	n	Mutagen, Respiratory, Some evidence of carcinogenicity		
Carbon black		Respiratory, Some evidence of carcinogenicity		

12. ECOLOGICAL INFORMATION

Ecological information:

Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:

Hazardous waste number:

Not a RCRA hazardous waste.

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

14. TRANSPORT INFORMATION

Proper shipping name:Not regulatedHazard class or division:NoneIdentification number:NonePacking group:None

International Air Transportation (ICAO/IATA)

Proper shipping name: Hazard class or division: Identification number: Packing group: Not regulated None None None

Water Transportation (IMO/IMDG)

Proper shipping name: Hazard class or division: Identification number: Packing group: Not regulated None None 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 minimusCERCLA/SARA Section 302 EHS:
CERCLA/SARA Section 311/312:None above reporting de minimusCercLA/SARA Section 311/312:
CERCLA/SARA 313:None above reporting de minimusCalifornia Proposition 65:This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status:	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.	
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 information added in Section(s): 1,2,3,6,7,8,10,11

Prepared by: Tricia Voghell, Regulatory Affairs Specialist

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.