

Revision Number: 001.3

Issue date: 10/01/2012

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Product type: Hysol 1C EPK RESIN Epoxy resin

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

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW			
Physical state: Color: Odor: WARNING:	Liquid Off white Negligible	HMIS: *2 HEALTH: *2 FLAMMABILITY: 1 PHYSICAL HAZARD: 0 Personal Protection: See MSDS Section 8 Y CAUSE ALLERGIC SKIN REACTION.	
WARNING.		Y CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.	
Relevant routes of exposu Potential Health Effects	re:	Skin, Inhalation, Eyes	
Inhalation: Skin contact: Eye contact: Ingestion:		May cause irritation to nose and throat. Mild respiratory tract irritation. Coughing. Allergic skin reaction. Itching. Redness. Moderate skin irritation. Moderate eye irritation. Redness. Not expected under normal conditions of use.	
Existing conditions aggrave exposure:	vated by	Eye, skin and respiratory disorders. Skin 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

Hazardous components	CAS NUMBER	%	
Talc	14807-96-6	30 - 60	
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	30 - 60	
Phenol polymer with formaldehyde, glycidyl ether	28064-14-4	10 - 30	
Titanium dioxide	13463-67-7	1 - 5	

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. If symptoms develop and persist, get medical attention.
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Keep individual calm. If symptoms develop and persist, get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	> 200 °C (> 392°F) Cleveland open cup
Autoignition temperature:	Not available.
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.
Unusual fire or explosion hazards:	In case of fire, keep containers cool with water spray. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Irritating organic fragments. Aldehydes. Acids.

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. Immediately contact emergency personnel. Scrape up as much material as possible. Clean residue with soap and water. Store in a partly filled, closed container until disposal.

7. HANDLING AND STORAGE

Handling:	Keep away from heat, spark and flame. Do not breathe gas/fumes/vapor/spray. Keep container closed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Storage:	Store in original container until ready to use. 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
Talc	2 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 20 MPPCF TWA 0.3 mg/m3 TWA Total dust.	None	50 ppm
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Phenol polymer with formaldehyde, glycidyl ether	None	None	None	None
Titanium dioxide	10 mg/m3 TWA	15 mg/m3 TWA Total dust.	None	None

Engineering controls:

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

Respiratory protection:

Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

Eye/face protection:

Skin protection:

Safety goggles or safety glasses with side shields.

Chemical resistant, impermeable 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:

Off white Negligible Not available. Not applicable Negligible 260 °C (500°F) (1,013 hPa) Not available. 1.57 Not available. > 200 °C (> 392°F) Cleveland open cup Not available. Not available. Not available. Not available. Insoluble Not available. 0.01 %; 0.13 g/l (value for resin and hardener together)

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of carbon. Irritating organic fragments. Acids. Aldehydes.
Incompatible materials:	Strong acids. Strong bases. Strong oxidizing agents. Amines. Water.
Conditions to avoid:	Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	
Talc	No	No	No	
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No	
Phenol polymer with formaldehyde, glycidyl ether	No	No	No	
Titanium dioxide	No	Group 2B	No	
Hazardous components		Health Effects/Targe	et Organs	
Talc		Irritant, Lung, Some evidence of carcinogenicity		
Epichlorohydrin-4,4'-isopropylidene diphenol resin		Allergen, Irritant		
Phenol polymer with formaldehyde, glycidyl ether		Irritant, Allergen		
Titanium dioxide		Irritant, Respiratory, Some evidence of carcinogenicity		

12. ECOLOGICAL INFORMATION

Ecological information:

Not available.

13. DISPOSAL CONSIDERATIONS

Informatio	n provided is for unused product only.
Recommended method of disposal:	Follow all local, state, federal and provincial regulations for disposal.
Hazardous waste number:	Not a RCRA hazardous waste.
14. T	RANSPORT INFORMATION
U.S. Department of Transportation Ground (4 Proper shipping name: Hazard class or division: Identification number: Packing group: International Air Transportation (ICAO/IATA) Proper shipping name: Hazard class or division: Identification number: Packing group:	9 CFR) Not regulated None None None Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin resin) 9 UN 3082
Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group: Marine pollutant:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A Epichlorhydrin resin) 9 UN 3082 III Bisphenol-A Epichlorhydrin resin

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: TSCA 12(b) Export Notification:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. None above reporting de minimus
CERCLA/SARA Section 302 EHS:	None above reporting de minimis
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health

CERCLA/SARA 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:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.	
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: 1, 14

Prepared by: Gary Pierson, Manager, Regulatory Affairs

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.