Material Safety Data Sheet





Revision Number: 002.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Product type: LOCTITE HYS 1C 4OZ PTB Epoxy Hardener

Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067 IDH number:1373718Item number:1373425_1320207Region:United StatesContact information:Telephone:860.571.5100MEDICAL EMERGENCY Phone:Poison Control Center1-877-671-4608 (toll free) or1-303-592-1711TRANSPORT EMERGENCY Phone:CHEMTREC1-800-424-9300 (toll free) or1-703-527-3887Internet:www.henkelna.com

2. HAZARDS IDENTIFICATION

	EMERGEN		
EMERGENCY OVERVIEW HMIS:			
Physical state:	Viscous, Liquid	HEALTH:	*3
Color:	Green	FLAMMABILITY:	1
Odor:	Ammoniacal, Strong	PHYSICAL HAZARD:	0
		Personal Protection:	See MSDS Section 8
DANGER:	CAUSES EYE AND	SKIN BURNS.	
	MAY CAUSE ALLE	RGIC SKIN AND RESPIRATOR	Y REACTION.
	MAY CAUSE RESP	PIRATORY TRACT IRRITATION	_
		IF SWALLOWED OR ABSORE	
Relevant routes of exposu	re: Skin, Inhalation, Ey	ves, Ingestion	
Potential Health Effects			
Inhalation:		Allergic respiratory reaction. May cause irritation to nose and throat. May cause rest tract irritation. May cause central nervous system effects with nausea, dizziness an May cause skin burns. May be harmful if absorbed through skin. Allergic skin react Redness Rash	
Skin contact:			
Eye contact:		Redness. Tissue damage.	
Ingestion:		f mouth and throat if swallowed. May be	harmful if swallowed.
Existing conditions aggrave exposure:	vated by Eye, skin, and resp	iratory disorders. Skin allergies. Respira	tory allergies.
	This material is cor 1910.1200).	nsidered hazardous by the OSHA Hazard	d Communication Standard (29 CFR

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS		
Hazardous components	CAS NUMBER	%
Talc	14807-96-6	30 - 60
Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct	68610-56-0	10 - 30
Quartz (SiO2)	14808-60-7	10 - 30
Diethylenetriamine	111-40-0	10 - 30

80-05-7

4,4'-Isopropylidenediphenol

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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:	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, ge medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
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. Never give anything by mouth to an unconscious person. Get immediate medical attention.
5. F	FIRE FIGHTING MEASURES
Flash point:	> 100 °C (> 212°F)
Autoignition temperature:	Not available.
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
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:	In case of fire, keep containers cool with water spray.
Hazardous combustion products:	Oxides of nitrogen. Oxides of carbon. Oxides of silicon. Irritating organic fragments.

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

7. HANDLING AND STORAGE

Handling:	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. Keep container closed. Use only with adequate ventilation.
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
Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct	None	None	None	None
Quartz (SiO2)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.	None	None
Diethylenetriamine	(SKIN) 1 ppm TWA	None	None	None
4,4'-Isopropylidenediphenol	None	None	None	None

Engineering controls:

Respiratory protection:

Eye/face protection:

Skin protection:

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

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH.

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

Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Butyl rubber gloves.

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:

Viscous, Liquid Green Ammoniacal, Strong Not available. Not available. Not available. Not available. Not available. 1.65 Not available. > 100 °C (> 212°F) Not available. Not available. Not available. Not available. Not available. Not available. 0.57 g/I EPA Method 24

10. STABILITY AND REACTIVITY

Stability:

Stable

Hazardous reactions:	Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Oxides of silicon. Irritating organic fragments.
Incompatible materials:	Strong bases. Strong oxidizing agents. Amines. Water Strong acids. Nitrites. Metals.
Conditions to avoid:	Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Excessive heat. Avoid temperatures above 38°C (100°F). Store away from incompatible materials. Failure to observe these precautions may result in excessive heat build-up causing an exotherm.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Car	cinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Talc	No		No	No
Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct	No		No	No
Quartz (SiO2)	Known To Be Human Carcinogen.		Group 1	No
Diethylenetriamine	No		No	No
4,4'-Isopropylidenediphenol	No		No	No
Hazardous components			Health Effects/Targe	t Organs
Talc			Irritant, Lung, Some evidence	of carcinogenicity
Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct		No Records		
Quartz (SiO2)		Immune system, Lung, Some evidence of carcinogenicity		
Diethylenetriamine		Allergen, Irritant, Eyes		
4,4'-Isopropylidenediphenol		Allergen, Blood, Irritant, Kidney, Reproductive, Spleen		

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.

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Hazardous waste number:

Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR) Proper shipping name: Amines

Hazard class or division: Identification number: Packing group:

Amines, liquid, corrosive, n.o.s. (Diethylenetriamine) UN 2735

IDH number: 1373718

International Air Transportation (ICA) Proper shipping name: Hazard class or division: Identification number: Packing group:	D/IATA) Amines, liquid, corrosive, n.o.s. (Diethylenetriamine) 8 UN 2735 III		
Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group:	AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine) 8 UN 2735 III		
1	5. 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		
TSCA 12(b) Export Notification:	Inventory. None above reporting de minimus		
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA 313:	None above reporting de minimis 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). 4,4'-Isopropylidenediphenol (CAS# 80-05-7).		
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		
WHMIS hazard class:	Substances List. D.2.A, D.2.B, E		

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: 1,2,4,5,7,8,9,10,15

Prepared by: Rena Petrides, Regulatory Affairs Specialist

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