Revision Number: 004.1

Issue date: 11/19/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **LOCTITE EA 1C-LV B HARDENER known as Kit 83208-Hysol 1CLV Hard**

IDH number: 702172

Product type: Epoxy Hardener

Item number: 83208_AB9308

Restriction of Use: None identified

Region: United States

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

Contact information:
Telephone: (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

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
DANGER:	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE AN ALLERGIC SKIN REACTION. MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.

HAZARD CLASS	HAZARD CATEGORY
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1

PICTOGRAM(S)

Precautionary Statements

Prevention: Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection. In case of inadequate ventilation wear respiratory protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison control center or physician. If skin irritation or rash occurs: Get medical attention. If experiencing respiratory symptoms: Call a poison center or physician. Wash contaminated clothing before reuse.

Storage: Store locked up.

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*
Talc	14807-96-6	30 - 60
Quartz (SiO2)	14808-60-7	10 - 30
Substituted Piperazine	Proprietary	5 - 10
Nonylphenol	25154-52-3	5 - 10
Diethylenetriamine	111-40-0	5 - 10
4,4'-Isopropylidenediphenol	80-05-7	1 - 5
Substituted silane	Proprietary	0.1 - 1

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

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

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

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

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: Personnel in vicinity and downwind should be evacuated. Burning produces obnoxious and toxic fumes. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen. Ammonia. Nitric acid. Aldehydes. Toxic fumes. 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. Wear appropriate personal protective equipment. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. 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.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed.

Storage: Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. 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
Talc	2 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.	None	50 ppm
Quartz (SiO2)	0.025 mg/m3 TWA Respirable fraction.	0.3 mg/m3 TWA Total dust. 2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable.	None	None
Substituted Piperazine	None	None	None	None
Nonylphenol	None	None	None	None
Diethylenetriamine	1 ppm TWA (SKIN)	None	None	None
4,4'-Isopropylidenediphenol	None	None	None	None
Substituted silane	None	None	None	None

Engineering controls: Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established 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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Tan, Light green
Odor: Ammoniacal
Odor threshold: Not available.
pH: Not available.
Vapor pressure: Not available.
Boiling point/range: 206.7 °C (404.1 °F)
Melting point/ range: Not available.
Specific gravity: 1.65
Vapor density: 3.5
Flash point: 101.7 °C (215.06 °F) Open cup
Flammable/Explosive limits - lower: Not available.
Flammable/Explosive limits - upper: Not available.
Autoignition temperature: Not available.
Evaporation rate: Not available.

Solubility in water:	Slight
Partition coefficient (n-octanol/water):	Not available.
VOC content:	< 0.1 % Estimated < 0.2 % (value for resin and hardener together) (estimated)
Viscosity:	Not available.
Decomposition temperature:	Not available.

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. Oxides of nitrogen. Ammonia. Nitric acid. Aldehydes. Toxic fumes. Irritating vapors.
Incompatible materials:	Oxidizing agents. Reactive metals. Acids. Sodium hypochlorite. Peroxides. This product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
Reactivity:	Not available.
Conditions to avoid:	Store away from incompatible materials. Excessive heat. Exposure to moisture. Avoid mixing resin (Part A) and curing agent (Part B) in batches greater than 2 pounds (.9 kg) unless you plan to use immediately.

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

Inhalation: Mists, vapors or liquid may cause severe irritation or burns. May cause allergic respiratory reaction.
Skin contact: Causes skin burns. May cause allergic skin reaction.
Eye contact: Causes serious eye damage.
Ingestion: If ingested, severe burns of the mouth and throat may occur, as well as perforation of the esophagus and the stomach.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Talc	None	Irritant, Lung, Some evidence of carcinogenicity
Quartz (SiO2)	None	Immune system, Lung, Some evidence of carcinogenicity
Substituted Piperazine	None	Irritant, Corrosive, Allergen
Nonylphenol	Oral LD50 (RAT) = 1,600 mg/kg Dermal LD50 (RABBIT) = 2,140 mg/kg	Allergen, Corrosive, Irritant, Kidney
Diethylenetriamine	Oral LD50 (RAT) = 1,080 mg/kg Oral LD50 (RAT) = 2.33 g/kg Oral LD50 (RAT) Approximate 1,140 mg/kg	Allergen, Irritant, Eyes
4,4'-Isopropylidenediphenol	Oral LD50 (RAT) = 4,100 mg/kg Oral LD50 (RAT) = 3,300 mg/kg	Allergen, Blood, Irritant, Kidney, Reproductive, Spleen
Substituted silane	None	Irritant, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Talc	No	Group 2B	No
Quartz (SiO2)	Known To Be Human Carcinogen.	Group 1	No
Substituted Piperazine	No	No	No
Nonylphenol	No	No	No
Diethylenetriamine	No	No	No
4,4'-Isopropylidenediphenol	No	No	No
Substituted silane	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

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

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Amines, liquid, corrosive, n.o.s. (Diethylenetriamine, Aminoethylpiperazine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: II

International Air Transportation (ICAO/IATA)

Proper shipping name: Amines, liquid, corrosive, n.o.s. (Diethylenetriamine, Aminoethylpiperazine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: II

Water Transportation (IMO/IMDG)

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine, Aminoethylpiperazine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: II
Marine pollutant: Nonylphenol

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: Alkyl phenol (CAS# 25154-52-3).

CERCLA/SARA Section 302 EHS: None above reporting de minimis
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA Section 313: 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). Nonylphenol (CAS# 25154-52-3). 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 Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 15

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