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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Hysol 1C Epoxi-Patch® Adhesive  
**Product type:** Epoxy Hardener  
**Company address:**  
 Henkel Corporation  
 1001 Trout Brook Crossing  
 Rocky Hill, Connecticut 06067

**Item No. :** 83200\_HARDENER  
**Region:** United States  
**Contact Information:**  
 Telephone: 860.571.5100  
 Emergency telephone: 860.571.5100  
 Internet: www.loctite.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous components</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
Epoxy resin/Curing agent 68610-56-0	10-30	None	None	None
Filler Mixture UNKNOWN	10-30	None	None	None
Talc 14807-96-6	10-30	2 mg/m <sup>3</sup> TWA particulate matter containing no asbestos and <1% crystalline silica	= 20 mppcf TWA	50 ppm
Silica, quartz 14808-60-7	10-30	0.025 mg/m <sup>3</sup> TWA respirable fraction	0.1mg/m <sup>3</sup> TWA (respirable)	None
Diethylene triamine 111-40-0	10-30	1 ppm TWA (skin)	None	None
4,4'-Isopropylidenediphenol 80-05-7	1-5	None	None	None

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

##### HMIS:

**Physical state:** Viscous liquid  
**Color:** Tan  
**Odor:** Strong, Ammoniacal

**HEALTH:** 3\*  
**FLAMMABILITY:** 1  
**PHYSICAL HAZARD:** 0  
**Personal Protection:** See Section 8

**DANGER:** CAUSES EYE AND SKIN BURNS.  
 MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.  
 MAY CAUSE RESPIRATORY TRACT IRRITATION.  
 MAY BE HARMFUL IF SWALLOWED.

**Relevant routes of exposure:** Eye contact, Ingestion, Inhalation, Skin contact

#### Potential Health Effects

**Inhalation:** Allergic respiratory reaction. May cause respiratory tract irritation. May cause irritation to nose and throat.  
**Skin contact:** May cause skin burns. Allergic skin reaction. Rash. Redness.  
**Eye contact:** Burns. Severe eye irritation. Redness. Tissue damage.  
**Ingestion:** May be harmful if swallowed. May cause burns of mouth and throat if swallowed.

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**Product name:** Hysol 1C Epoxi-Patch® Adhesive

**Existing conditions aggravated by exposure:**

Skin disorders. Skin allergies. Respiratory disorders. Eye disorders.

See Section 11 for additional toxicological information.

#### 4. FIRST AID MEASURES

**Inhalation:** Remove 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 shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if symptoms occur.

**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. Get medical attention immediately.

**Notes to physician:** None.

#### 5. FIRE-FIGHTING MEASURES

**Flash point:** Greater than 101.6°C (215°F) (estimated)

**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 fire fighting procedures:** Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Unusual fire or explosion hazards:** In the event of fire, cool tanks with water spray.

**Hazardous combustion products:** Oxides of carbon. Oxides of nitrogen. Irritating organic fragments.

#### 6. ACCIDENTAL RELEASE MEASURES

**Environmental precautions:** Prevent product from entering drains or open waters.

**Clean-up methods:** Remove all ignition sources. Immediately contact emergency personnel. Scrape up as much material as possible. Clean residue with soap and water. Store in a closed container until ready for disposal.

#### 7. HANDLING AND STORAGE

**Handling:** Keep away from heat, spark and flame. Do not breathe mist or vapors. 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.

**Incompatible products:** Refer to Section 10.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

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Product name: Hysol 1C Epoxi-Patch® Adhesive

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering controls:</b>	Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.
<b>Respiratory protection:</b>	If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH.
<b>Skin protection:</b>	Chemical resistant, impermeable gloves. Butyl rubber gloves. Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.
<b>Eye/face protection:</b>	Chemical splash goggles or safety glasses with side shields.

See Section 2 for exposure limits.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Viscous liquid
<b>Color:</b>	Tan
<b>Odor:</b>	Strong, Ammoniacal
<b>Vapor pressure:</b>	<1 mmHg @ 20°C (68°F)
<b>pH:</b>	Not applicable
<b>Boiling point/range:</b>	207°C (404°F)
<b>Melting point/range:</b>	Not available
<b>Specific gravity:</b>	1.65
<b>Vapor density:</b>	3.5
<b>Evaporation rate:</b>	Not available
<b>Solubility in water:</b>	Slightly soluble
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>VOC content:</b>	<0.1% (value for resin and hardener together)

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous polymerization:</b>	Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.
<b>Hazardous decomposition products:</b>	None
<b>Incompatibility:</b>	Strong acids. Strong bases. Strong oxidizers. Amines. Water.
<b>Conditions to avoid:</b>	Temperatures above 37.8°C (100°F). Excessive heat. Storage with incompatible materials. Avoid mixing resin (Part A) and curing agent (Part B) in batches greater than 2 pound (.9 kg) unless you plan to use immediately. Failure to observe these precautions may result in excessive heat build-up causing an exotherm.

## 11. TOXICOLOGICAL INFORMATION

### Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Epoxy resin/Curing agent 68610-56-0	No	No	No
Filler Mixture UNKNOWN	No	No	No
Talc 14807-96-6	No	No	No
Silica, quartz 14808-60-7	Known Carcinogen	Group 1	Yes
Diethylene triamine 111-40-0	No	No	No
4,4'-Isopropylidenediphenol 80-05-7	No	No	No

**Literature Referenced Target Organ & Other Health Effects**

<b>Hazardous components</b>	<b>Health Effects/Target Organs</b>
Epoxy resin/Curing agent 68610-56-0	No data
Filler Mixture UNKNOWN	No data
Talc 14807-96-6	Some evidence of carcinogenicity, Lung, Irritant
Silica, quartz 14808-60-7	Some evidence of carcinogenicity, Lung, Immune system
Diethylene triamine 111-40-0	Allergen, Eyes, Irritant
4,4'-Isopropylidenediphenol 80-05-7	Allergen, Blood, Irritant, Kidney, Spleen, Reproductive

**12. ECOLOGICAL INFORMATION**

**Ecological information:** Not available

**13. DISPOSAL CONSIDERATIONS**

Information provided is for unused product only.

**Recommended method of disposal:** Dispose according to EPA and local governmental regulations.

**EPA hazardous waste number:** Not a RCRA hazardous waste.

**14. TRANSPORT INFORMATION**

The shipping classifications in this section are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

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

**Proper shipping name:** Diethylenetriamine solution  
**Hazard class or division:** 8  
**Identification number:** UN 2079  
**Packing group:** II  
**Exceptions:** (Not more than 1 Liter) Consumer Commodity ORM-D

**International Air Transportation (ICAO/IATA):**

**Proper shipping name:** Diethylenetriamine solution  
**Hazard class or division:** 8  
**Identification number:** UN2079  
**Packing group:** II

**Water Transportation (IMO/IMDG):**

**Proper shipping name:** Diethylenetriamine solution  
**Hazard class or division:** 8  
**Identification number:** UN2079  
**Packing group:** II  
**Marine pollutant:** None known

## 15. REGULATORY INFORMATION

### United States Regulatory Information

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
<b>TSCA 12 (b) Export Notification:</b>	None.
<b>CERCLA/SARA Section 302 EHS:</b>	None.
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health Hazard
<b>CERCLA/SARA 313:</b>	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).
<b>California Proposition 65:</b>	This product contains a chemical known to the State of California to cause cancer.

### Canada Regulatory Information

<b>CEPA DSL/NDSL Status:</b>	All components are listed on or are exempt from listing on the Domestic Substances List.
<b>WHMIS hazard class:</b>	E, 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): 2, 15

**Prepared by:** Kyra Kozak Woods, Manager, Regulatory Affairs

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