



Revision Date: 03/16/2006

Issue date: 04/05/2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Hysol 0151 Epoxi-Patch® Adhesive
Product type: Epoxy Hardener
Company address:
Henkel Corporation
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067

Item No. : 83176_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>
Polyamide resin 68410-23-1	60-100	None	None	None
Triethylenetetramine 112-24-3	10-30	None	None	1 ppm, skin TWA, (WEEL)
Silica, amorphous, fumed, crystalline-free 112945-52-5	1-5	6 mg/m ³ TWA	10 mg/m ³ TWA	3 mg/m ³ TWA respirable dust

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state: Paste
Color: Translucent Amber
Odor: 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.

Existing conditions aggravated by exposure: Skin disorders. Skin allergies. Respiratory disorders. Eye disorders.

See Section 11 for additional toxicological information.

Item No. : 83176_HARDENER

Product name: Hysol 0151 Epoxi-Patch® Adhesive

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 129.5°C (265°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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:	Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.
Respiratory protection:	Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

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

Eye/face protection: Chemical splash goggles or safety glasses with side shields.

See Section 2 for exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Paste
Color: Translucent Amber
Odor: Ammoniacal
Vapor pressure: <0.01 mmHg @20°C (68° F)
pH: Not applicable
Boiling point/range: 270°C (500°F)
Melting point/range: Not available
Specific gravity: 0.98
Vapor density: 5
Evaporation rate: Not available
Solubility in water: Slightly soluble
Partition coefficient (n-octanol/water): Not available
VOC content: 0% (value for resin and hardener together)

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous polymerization: Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.

Hazardous decomposition products: None

Incompatibility: Strong acids. Strong bases. Strong oxidizers. Amines. Water.

Conditions to avoid: 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
Polyamide resin 68410-23-1	No	No	No
Triethylenetetramine 112-24-3	No	No	No
Silica, amorphous, fumed, crystalline-free 112945-52-5	No	No	No

Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
Polyamide resin 68410-23-1	Corrosive, Irritant
Triethylenetetramine 112-24-3	Allergen, Developmental, Irritant, Mutagen, Corrosive
Silica, amorphous, fumed, crystalline-free 112945-52-5	Nuisance dust

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: Triethylenetetramine mixture
Hazard class or division: 8
Identification number: UN 2259
Packing group: II
Exceptions: (Not more than 1 Liter) Consumer Commodity ORM-D

International Air Transportation (ICAO/IATA):

Proper shipping name: Triethylenetetramine mixture
Hazard class or division: 8
Identification number: UN2259
Packing group: II

Water Transportation (IMO/IMDG):

Proper shipping name: Triethylenetetramine mixture
Hazard class or division: 8
Identification number: UN2259
Packing group: II
Marine pollutant: None known

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.

CERCLA/SARA Section 302 EHS: None.
CERCLA/SARA Section 311/312: Immediate Health Hazard
CERCLA/SARA 313: None.

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Domestic Substances List.
WHMIS hazard class: E, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: Corrected information in Section(s) 14.

Prepared by: Gary Pierson, Sr. Product Safety and Regulatory Affairs Specialist

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation 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 of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.



Revision Date: 05/30/2006

Issue date: 05/30/2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Hysol 0151 Epoxi-Patch® Adhesive
Product type: Epoxy Resin
Company address:
Henkel Corporation
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067

Item No. : 83176_RESIN
Region: United States
Contact Information:
Telephone: 860.571.5100
Emergency telephone: 860.571.5100
Internet: www.loctite.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components	%	ACGIH TLV	OSHA PEL	OTHER
Epichlorohydrin-4,4'-isopropylidene diphenol resin 25068-38-6	60-100	None	None	None
Oxirane, (butoxymethyl)- 2426-08-6	10-30	3 ppm TWA (skin)	270 mg/m ³ TWA 50 ppm TWA	None
Silica, amorphous, fumed, crystalline-free 112945-52-5	1-5	6 mg/m ³ TWA	10 mg/m ³ TWA	3 mg/m ³ TWA respirable dust

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state: Liquid	HEALTH:	2*
Color: Milky White	FLAMMABILITY:	1
Odor: None	PHYSICAL HAZARD:	1
	Personal Protection:	See Section 8

WARNING: MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.
MAY BE HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED.
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
COMBUSTIBLE LIQUID AND VAPOR.

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

Potential Health Effects

Inhalation:	Allergic respiratory reaction. Coughing. Shortness of breath. Mild respiratory tract irritation.
Skin contact:	Allergic skin reaction. Moderate skin irritation. Itching. Redness.
Eye contact:	Severe eye irritation. If left untreated, corneal damage can occur and injury is slow to heal.
Ingestion:	May be harmful if swallowed.

Existing conditions aggravated by exposure: Skin disorders. Skin allergies. Respiratory disorders. Eye disorders.

See Section 11 for additional toxicological information.

Item No. : 83176_RESIN

Product name: Hysol 0151 Epoxi-Patch® Adhesive

4. FIRST AID MEASURES

Inhalation:	Remove to fresh air. If symptoms develop and persist, get medical attention.
Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and shoes. 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 if symptoms develop and persist.
Notes to physician:	None.

5. FIRE-FIGHTING MEASURES

Flash point:	Greater than 91°C (196°F) Pensky Martens closed 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 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. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Irritating organic fragments. Acids. Aldehydes.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:	Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.
Respiratory protection:	Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.
Skin protection:	Chemical resistant, impermeable gloves.

Item No. : 83176_RESIN

Product name: Hysol 0151 Epoxi-Patch® Adhesive

Eye/face protection: Chemical splash goggles or safety glasses with side shields.

See Section 2 for exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Milky White
Odor: None
Vapor pressure: 2 mmHg @20°C (68° F)
pH: Not applicable
Boiling point/range: 139.98°C (284°F)
Melting point/range: Not available
Specific gravity: 1.13
Vapor density: Not available
Evaporation rate: Not available
Solubility in water: Slightly soluble
Partition coefficient (n-octanol/water): Not available
VOC content: <0.05% (value for resin and hardener together) (estimated)

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous polymerization: Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.

Hazardous decomposition products: None

Incompatibility: Strong acids. Strong bases. Strong oxidizers. Amines. Water.

Conditions to avoid: 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
Epichlorohydrin-4,4'-isopropylidene diphenol resin 25068-38-6	No	No	No
Oxirane, (butoxymethyl)- 2426-08-6	No	No	No
Silica, amorphous, fumed, crystalline-free 112945-52-5	No	No	No

Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
Epichlorohydrin-4,4'-isopropylidene diphenol resin 25068-38-6	Allergen, Irritant
Oxirane, (butoxymethyl)- 2426-08-6	Mutagen, Liver, Irritant, Central nervous system, Allergen
Silica, amorphous, fumed, crystalline-free 112945-52-5	Nuisance dust

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

International Air Transportation (ICAO/IATA):

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

Water Transportation (IMO/IMDG):

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

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.

CERCLA/SARA Section 302 EHS: None above reporting de minimus.
CERCLA/SARA Section 311/312: Immediate Health Hazard, Delayed Health Hazard
CERCLA/SARA 313: None above reporting de minimus.

California Proposition 65: This product contains a chemical known to the State of California to cause cancer and 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 Domestic Substances List.
WHMIS hazard class: B.3, 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

Prepared by: Gary Pierson, Sr. Product Safety and Regulatory Affairs Specialist

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation 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 of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.