

# Material Safety Data Sheet



Revision Number: 002.1

Issue date: 07/23/2009

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Hysol 0151 RESIN  
**Product use:** Adhesive

**IDH number:** 702119  
**Item number:** 83069\_193035  
**Region:** Canada

**Company address:**  
Henkel Canada Corporation  
2225 Meadowpine Boulevard  
Mississauga, Ontario L5N 7P2

**Contact information:**  
Telephone: 905.814.6511  
Emergency telephone: 905.814.6511  
Internet: www.henkeln.com

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**Physical state:** Liquid  
**Color:** Milky, White  
**Odor:** None  
**WHMIS hazard class:** B.3, D.2.A, D.2.B

**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:** Skin, Inhalation, Eyes, Ingestion

### Potential Health Effects

**Inhalation:** Allergic respiratory reaction. May be harmful if inhaled. Coughing. Shortness of breath. Mild respiratory tract irritation.  
**Skin contact:** Allergic skin reaction. May be harmful if absorbed through skin. 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:** Eye, skin and respiratory disorders. Skin allergies. Respiratory allergies. Asthma.

See Section 11 for additional toxicological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	60 - 100
Butyl 2,3-epoxypropyl ether	2426-08-6	10 - 30
Silicon dioxide	7631-86-9	1 - 5

## 4. FIRST AID MEASURES

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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 footwear. If symptoms develop and persist, get medical attention.

<b>Eye contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	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

<b>Flash point:</b>	> 93.3 °C (> 199.94 °F) Pensky Martens closed cup
<b>Autoignition temperature:</b>	Not available
<b>Flammable/Explosive limits - lower:</b>	Not available
<b>Flammable/Explosive limits - upper:</b>	Not available
<b>Extinguishing media:</b>	Foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
<b>Unusual fire or explosion hazards:</b>	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.
<b>Hazardous combustion products:</b>	Oxides of carbon. Irritating organic fragments. Acids. Aldehydes.
<b>Sensitivity to Mechanical Impact:</b>	Not available
<b>Sensitivity to static discharge:</b>	Not available

## 6. ACCIDENTAL RELEASE MEASURES

**Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.**

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	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

<b>Handling:</b>	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.
<b>Storage:</b>	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 Canada Customer Service at (905) 814-6511.

## 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
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Butyl 2,3-epoxypropyl ether	3 ppm TWA (SKIN) (Sensitizer.)	50 ppm (270 mg/m3) TWA	None	None
Silicon dioxide	6 mg/m3 TWA	20 MPPCF TWA 0.8 mg/m3 TWA	None	3 mg/m3 TWA Respirable fraction.

<b>Engineering controls:</b>	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
<b>Respiratory protection:</b>	Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.
<b>Eye/face protection:</b>	Safety goggles or safety glasses with side shields.
<b>Skin protection:</b>	Chemical resistant, impermeable gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Milky, White
<b>Odor:</b>	None
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	2 mm hg (20 °C (68°F))
<b>Boiling point/range:</b>	140 °C (284°F)
<b>Melting point/ range:</b>	Not available
<b>Specific gravity:</b>	1.13
<b>Vapor density:</b>	Not available
<b>Flash point:</b>	> 93.3 °C (> 199.94 °F) Pinsky Martens closed cup
<b>Flammable/Explosive limits - lower:</b>	Not available
<b>Flammable/Explosive limits - upper:</b>	Not available
<b>Autoignition temperature:</b>	Not available
<b>Evaporation rate:</b>	Not available
<b>Solubility in water:</b>	Not miscible or difficult to mix
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>VOC content:</b>	< 0.05 % (value for resin and hardener together) (estimated)

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous reactions:</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 known
<b>Incompatible materials:</b>	Strong acids. Strong bases. Strong oxidizing agents. Amines. Water.
<b>Conditions to avoid:</b>	Avoid temperatures above 38°C (100°F). Excessive heat. Store away from incompatible materials. Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Failure to observe these precautions may result in excessive heat build-up causing an exotherm.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicologically synergistic products:</b>	Not available
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Refer to the following for Irritancy of Product, Sensitization to Product, Carcinogenicity, Reproductive Toxicity, Teratogenicity, and Mutagenicity.

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	ACGIH Carcinogen
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No	No
Butyl 2,3-epoxypropyl ether	No	No	No	No
Silicon dioxide	No	No	No	No

Hazardous components	LD50s and LC50s	Health Effects/Target Organs
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant
Butyl 2,3-epoxypropyl ether	Oral LD50 (RAT) = 2,000 mg/kg Dermal LD50 (rabbit) = 0.788 g/kg Inhalation LC50 (RAT) = 670 mg/l	Irritant, Allergen, Central nervous system, Liver, Mutagen
Silicon dioxide	Oral LD50 (RAT) > 22,500 mg/kg Oral LD50 (RAT) > 22,500 mg/kg	Nuisance dust

## 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.

## 14. TRANSPORT INFORMATION

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

### Canada Transportation of Dangerous Goods - Ground

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

## 15. REGULATORY INFORMATION

### Canada Regulatory Information

**CEPA DSL/NDSL Status:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

### 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.

## 16. OTHER INFORMATION

**This material safety data sheet contains changes from the previous version in sections:** New Material Safety Data Sheet format.

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the MSDS contains all the information required by the CPR.**

**Prepared by:** Gary Pierson, Sr. Regulatory Affairs Specialist

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# Material Safety Data Sheet



Revision Number: 003.1

Issue date: 07/22/2009

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Hysol 0151 HARD  
**Product use:** Adhesive

**IDH number:** 702120  
**Item number:** 83069\_AB0151  
**Region:** Canada

**Company address:**  
Henkel Canada Corporation  
2225 Meadowpine Boulevard  
Mississauga, Ontario L5N 7P2

**Contact information:**  
Telephone: 905.814.6511  
Emergency telephone: 905.814.6511  
Internet: www.henkeln.com

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**Physical state:** Paste  
**Color:** Translucent, Amber  
**Odor:** Ammoniacal  
**WHMIS hazard class:** D.2.A, D.2.B, E

**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:** Skin, Inhalation, Eyes, Ingestion

### 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:** Eye, skin and respiratory disorders. Skin allergies.

See Section 11 for additional toxicological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	68410-23-1	60 - 100
Triethylenetetramine	112-24-3	10 - 30
Silicon dioxide	7631-86-9	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. Wash clothing before reuse. Thoroughly clean shoes before reuse. 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. Get immediate medical attention.

## 5. FIRE FIGHTING MEASURES

**Flash point:** > 129.5 °C (> 265.1 °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 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 carbon. Oxides of nitrogen. Irritating organic fragments.

**Sensitivity to Mechanical Impact:** Not available

**Sensitivity to static discharge:** Not available

## 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 Canada Customer Service at (905) 814-6511.

## 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
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	None	None	None	None
Triethylenetetramine	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Silicon dioxide	6 mg/m3 TWA	20 MPPCF TWA 0.8 mg/m3 TWA	None	3 mg/m3 TWA Respirable fraction.

<b>Engineering controls:</b>	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
<b>Respiratory protection:</b>	Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.
<b>Eye/face protection:</b>	Safety goggles or safety glasses with side shields.
<b>Skin protection:</b>	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Chemical resistant, impermeable gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Paste
<b>Color:</b>	Translucent, Amber
<b>Odor:</b>	Ammoniacal
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	0.01 mm hg (20 °C (68°F))
<b>Boiling point/range:</b>	270 °C (518°F)
<b>Melting point/ range:</b>	Not available
<b>Specific gravity:</b>	0.98
<b>Vapor density:</b>	5
<b>Flash point:</b>	> 129.5 °C (> 265.1 °F) ; Estimated
<b>Flammable/Explosive limits - lower:</b>	Not available
<b>Flammable/Explosive limits - upper:</b>	Not available
<b>Autoignition temperature:</b>	Not available
<b>Evaporation rate:</b>	Not available
<b>Solubility in water:</b>	Not miscible or difficult to mix
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>VOC content:</b>	0 % (value for resin and hardener together)

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous reactions:</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>Incompatible materials:</b>	Strong acids. Strong bases. Strong oxidizing agents. Amines. Water.
<b>Conditions to avoid:</b>	Avoid temperatures above 38°C (100°F). Excessive heat. Store away from incompatible materials. Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Failure to observe these precautions may result in excessive heat build-up causing an exotherm.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicologically synergistic products:</b>	Not available
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Refer to the following for Irritancy of Product, Sensitization to Product, Carcinogenicity, Reproductive Toxicity, Teratogenicity, and Mutagenicity.

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	ACGIH Carcinogen
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	No	No	No	No
Triethylenetetramine	No	No	No	No
Silicon dioxide	No	No	No	No

Hazardous components	LD50s and LC50s	Health Effects/Target Organs
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	None	Corrosive, Irritant
Triethylenetetramine	None	Allergen, Corrosive, Developmental, Irritant, Mutagen
Silicon dioxide	Oral LD50 (RAT) > 22,500 mg/kg Oral LD50 (RAT) > 22,500 mg/kg	Nuisance dust

## 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.

## 14. TRANSPORT INFORMATION

### Canada Transportation of Dangerous Goods - Ground

Proper shipping name: TRIETHYLENETETRAMINE solution  
 Hazard class or division: 8  
 Identification number: UN 2259  
 Packing group: II

### International Air Transportation (ICAO/IATA)

Proper shipping name: Triethylenetetramine solution  
 Hazard class or division: 8  
 Identification number: UN 2259  
 Packing group: II

### Water Transportation (IMO/IMDG)

Proper shipping name: TRIETHYLENETETRAMINE solution  
 Hazard class or division: 8  
 Identification number: UN 2259  
 Packing group: II

## 15. REGULATORY INFORMATION

### Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

### 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.

## 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the MSDS contains all the information required by the CPR.

Prepared by: Gary Pierson, Sr. Regulatory Affairs Specialist

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