# **Material Safety Data Sheet**



Revision Number: 003.2 Issue date: 12/11/2012

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name:Hysol 608 HARDIDH number:702124Product type:Epoxy HardenerItem number:83082\_AB0608Region:United States

Company address:Contact information:Henkel CorporationTelephone: 860.571.5100

One Henkel Way MEDICAL EMERGENCY Phone: Poison Control Center

Rocky Hill, Connecticut 06067

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** 

HMIS:

Physical state:pasteHEALTH:\*2Color:Translucent, amberFLAMMABILITY:1Odor:Slight, ammoniacalPHYSICAL HAZARD:1

Personal Protection: See MSDS Section 8

WARNING: MAY CAUSE ALLERGIC SKIN REACTION.

CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

HARMFUL IF SWALLOWED.

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

**Potential Health Effects** 

Inhalation: May cause respiratory tract irritation. May cause irritation to nose and throat.

**Skin contact:** Allergic skin reaction. Moderate skin irritation. Rash. Redness.

**Eye contact:** Moderate eye irritation. Redness. Tissue damage.

**Ingestion:** Harmful if swallowed.

Existing conditions aggravated by

exposure:

Skin disorders. Skin allergies. Eye disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR

1910.1200).

See Section 11 for additional toxicological information.

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Polymercaptan hardener	Proprietary	60 - 100
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	5 - 10
Silicon dioxide	7631-86-9	5 - 10
Ethylene glycol	107-21-1	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. If symptoms develop and persist, get medical attention. Wash clothing before reuse. Thoroughly clean shoes before

reuse.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, 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. Keep individual

calm. Get immediate medical attention.

#### 5. FIRE FIGHTING MEASURES

Flash point: 157 ℃ (314.6 ℉) Cleveland open cup

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.

#### 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: 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 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
Polymercaptan hardener	None	None	None	None
2,4,6-Tris(dimethylaminomethyl)phenol	None	None	None	None
Silicon dioxide	6 mg/m3 TWA	20 MPPCF TWA 0.8 mg/m3 TWA	None	3 mg/m3 TWA Respirable fraction.
Ethylene glycol	100 mg/m3 Ceiling Aerosol.	None	None	None

**Engineering controls:** Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use a NIOSH approved air-purifying respirator if the potential to exceed

established exposure limits exists.

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

Skin protection: Chemical resistant, impermeable gloves. 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: paste

Color: Translucent, amber Odor: Slight, ammoniacal Odor threshold: Not available. pH: Not applicable

Vapor pressure: 0.1 mm hg (20 ℃ (68年)) Boiling point/range: > 260.2 °C (> 500.4 °F) Not available.

Melting point/ range: Specific gravity: 1.15 Vapor density:

Flash point: 157 °C (314.6 °F) Cleveland open cup

Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. **Evaporation rate:** < 0.01 Solubility in water: Slightly soluble

Partition coefficient (n-octanol/water): Not available.

**VOC** content: < 0.40 % (value for resin and hardener together) (estimated)

# 10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous reactions: Will not occur.

Hazardous decomposition products: None

Incompatible materials: Strong acids. Strong oxidizing agents.

Conditions to avoid: Excessive heat. Store away from incompatible materials.

# 11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polymercaptan hardener	No	No	No
2,4,6-Tris(dimethylaminomethyl)phenol	No	No	No
Silicon dioxide	No	No	No
Ethylene glycol	No	No	No

Hazardous components	Health Effects/Target Organs
Polymercaptan hardener	No Records
2,4,6-Tris(dimethylaminomethyl)phenol	Irritant, Allergen
Silicon dioxide	Nuisance dust
Ethylene glycol	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant,
Luiyiche giyoo	Kidney, Liver, Metabolic

# 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.

Hazardous waste number: Not a RCRA hazardous waste.

#### 14. TRANSPORT INFORMATION

#### 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:

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

#### **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 above reporting de minimus

CERCLA/SARA Section 302 EHS: None above reporting de minimis CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA 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). Ethylene glycol (CAS# 107-21-1).

California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

#### **Canada Regulatory Information**

CEPA DSL/NDSL Status: One or more components are not listed on, and are not exempt from listing on either the

Domestic Substances List or the Non-Domestic Substances List.

WHMIS hazard class: D.2.A, D.2.B

# 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: 1

Prepared by: Gary Pierson, Manager, Regulatory Affairs

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# **Material Safety Data Sheet**



Revision Number: 004.0 Issue date: 01/03/2011

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name:Hysol 608 RESINIDH number:702123Product type:Epoxy resinItem number:83082\_193032Region:United States

Company address:Contact information:Henkel CorporationTelephone: 860.571.5100

One Henkel Way MEDICAL EMERGENCY Phone: Poison Control Center

Rocky Hill, Connecticut 06067

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** 

Paste HEALTH: 2

 Color:
 Milky white
 FLAMMABILITY:
 1

 Odor:
 Slight
 PHYSICAL HAZARD:
 1

Personal Protection: See MSDS Section 8

WARNING: MAY CAUSE ALLERGIC SKIN REACTION.

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Skin, Inhalation, Eyes

**Potential Health Effects** 

Physical state:

**Inhalation:** May cause irritation to nose and throat. Coughing.

**Skin contact:** Allergic skin reaction. Moderate skin irritation. Itching. Redness.

**Eye contact:** Moderate eye irritation. Redness.

**Ingestion:** Not expected under normal conditions of use.

Existing conditions aggravated by

exposure:

Eye, skin and respiratory disorders. Skin allergies.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR

1910.1200).

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
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. 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. If symptoms develop and persist, get medical attention.

# 5. FIRE FIGHTING MEASURES

Flash point: > 93 ℃ (> 199.4 ℉) Pensky Martens closed cup

Autoignition temperature:

Flammable/Explosive limits - lower:

Not available
Flammable/Explosive limits - upper:

Not available

**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: 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.

**Hazardous combustion products:** Oxides of carbon. 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: 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 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
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Silicon dioxide	6 mg/m3 TWA	20 MPPCF TWA 0.8 mg/m3 TWA	None	3 mg/m3 TWA Respirable fraction.

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

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. Safety

showers and eye wash stations should be available.

Skin protection: Chemical resistant, impermeable gloves.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:PasteColor:Milky whiteOdor:SlightOdor threshold:Not availablepH:Not applicableVapor pressure:Not available

Boiling point/range:  $> 260 \, ^{\circ} \, (> 500 \, ^{\circ})$  Melting point/ range: Not available

Specific gravity: 1.17 Vapor density: > 1

Flash point: > 93 ℃ (> 199.4 ℉) Pensky Martens closed cup

Flammable/Explosive limits - lower:
Plammable/Explosive limits - upper:
Autoignition temperature:
Not available
Not available
Evaporation rate:
Not available

Solubility in water: Not miscible or difficult to mix

Partition coefficient (n-octanol/water): Not available

**VOC content:** < 0.40 % (value for resin and hardener together) (estimated)

# 10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous reactions: Will not occur.

Hazardous decomposition products: None

Incompatible materials: Strong bases. Strong acids. Strong oxidizing agents. Amines. Water.

Conditions to avoid: 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

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Silicon dioxide	No	No	No

Hazardous components	Health Effects/Target Organs
Epichlorohydrin-4,4'-isopropylidene diphenol resin	Allergen, Irritant
Silicon dioxide	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. Follow all

local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste. Not a RCRA hazardous waste.

#### 14. TRANSPORT INFORMATION

**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: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin

resin)

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A

Epichlorhydrin resin)

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Marine pollutant: Bisphenol-A Epichlorhydrin resin

# 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 above reporting de minimus

CERCLA/SARA Section 302 EHS: None above reporting de minimus

CERCLA/SARA Section 311/312: Immediate Health

CERCLA/SARA 313: None above reporting de minimus

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.

WHMIS hazard class: D.2.B

#### 16. OTHER INFORMATION

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

Prepared by: Gary Pierson, Manager, Regulatory Affairs

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.

IDH number: 702123 Product name: Hysol 608 RESIN