# **Material Safety Data Sheet**



Revision Number: 002.2 Issue date: 08/10/2012

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: HYSOL 9340 EPK 2.70Z KT RESIN IDH number: 702137
Product type: Epoxy resin Item number: 83104\_193038
Region: 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

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:
 Paste
 HEALTH:
 \*2

 Color:
 Gray
 FLAMMABILITY:
 1

 Odor:
 None
 PHYSICAL HAZARD:
 0

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, Ingestion

**Potential Health Effects** 

**Inhalation:** Mild respiratory tract irritation. 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 to be harmful by ingestion.

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
Oxirane, 2,2',2",2"'-[1,2-ethanediylidenetetrak	7328-97-4	10 - 30
Titanium dioxide	13463-67-7	1 - 5
Glass, oxide, chemicals	65997-17-3	1 - 5
Charcoal, bone	8021-99-6	1 - 5
Treated fumed silica	67762-90-7	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.

IDH number: 702137 Product name: HYSOL 9340 EPK 2.70Z KT RESIN

**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 °C (> 199.4 °F) 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
Oxirane, 2,2',2",2"'-[1,2-ethanediylidenetetrak	None	None	None	None
Titanium dioxide	10 mg/m3 TWA	15 mg/m3 TWA Total dust.	None	None
Glass, oxide, chemicals	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Charcoal, bone	None	None	None	None
Treated fumed silica	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	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.

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

Skin protection: Chemical resistant, impermeable gloves.

#### PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Paste Color: Gray Odor: None

Odor threshold: Not available. pH: Not applicable Not available. Vapor pressure: Boiling point/range: > 260 °C (> 500°F) Melting point/ range: Not available.

1.26

Specific gravity: Vapor density: Not available.

> 93 °C (> 199.4 °F) Pensky Martens closed cup Flash point:

Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Evaporation rate: Faster than ether.

Solubility in water: Not miscible or difficult to mix

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 reactions: Will not occur.

Hazardous decomposition products:

Incompatible materials: Strong acids. Strong bases. 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
Oxirane, 2,2',2",2"-[1,2-ethanediylidenetetrak	No	No	No
Titanium dioxide	No	Group 2B	No
Glass, oxide, chemicals	No	No	No
Charcoal, bone	No	No	No
Treated fumed silica	No	No	No

Hazardous components	Health Effects/Target Organs		
Epichlorohydrin-4,4'-isopropylidene diphenol resin	Allergen, Irritant		
Oxirane, 2,2',2",2"'-[1,2-ethanediylidenetetrak	Irritant, Allergen		
Titanium dioxide	Irritant, Respiratory, Some evidence of carcinogenicity		
Glass, oxide, chemicals	Allergen, Respiratory		
Charcoal, bone	No Target Organs		
Treated fumed silica	Irritant		

### 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 regulatedHazard class or division:NoneIdentification number:NonePacking group:None

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin

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.

IDH number: 702137 Product name: HYSOL 9340 EPK 2.70Z KT RESIN

TSCA 12(b) Export Notification: None above reporting de minimus

CERCLA/SARA Section 302 EHS:
CERCLA/SARA Section 311/312:
CERCLA/SARA 313:

None above reporting de minimus
Immediate Health, Delayed Health
None above reporting de minimus

California Proposition 65: This product contains a chemical known to the State of California to cause birth defects or

other reproductive harm. This product contains a chemical known in the State of California

to cause cancer.

**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.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

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

IDH number: 702137 Product name: HYSOL 9340 EPK 2.70Z KT RESIN

# **Material Safety Data Sheet**



**Revision Number: 003.2** Issue date: 08/10/2012

### 1. PRODUCT AND COMPANY IDENTIFICATION

**HYSOL 9340 EPK 2.70Z KT HARD** IDH number: Product name: 702138 Product type: **Epoxy Hardener** Item number: 83104 AB1052 Region: **United States** 

Company address: **Contact information:** Henkel Corporation Telephone: 860.571.5100

MEDICAL EMERGENCY Phone: Poison Control Center One Henkel Way 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: Viscous, Liquid HEALTH: \*2 FLAMMABILITY: Green, Gray, Brown 1 Strong, Ammoniacal PHYSICAL HAZARD: 0

Odor: See MSDS Section 8 **Personal Protection:** 

WARNING: MAY CAUSE ALLERGIC SKIN REACTION.

CAUSES EYE AND SKIN IRRITATION.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

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

**Potential Health Effects** 

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

Skin contact: Severe skin irritation. Allergic skin reaction. Rash. Redness.

Eye contact: Severe eye irritation. Redness. Tissue damage.

May cause gastrointestinal tract irritation if swallowed. Nausea. Vomiting. Ingestion:

Existing conditions aggravated by

exposure:

Color:

Eye disorders. Skin allergies. Skin 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	%
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	68082-29-1	30 - 60
Talc	14807-96-6	30 - 60
Triethylenetetramine	112-24-3	1 - 5
Silicon dioxide	7631-86-9	1 - 5
Methylimidazole 1-	616-47-7	1 - 5
Diethylenetriamine	111-40-0	1 - 5
Quartz (SiO2)	14808-60-7	0.1 - 1

IDH number: 702138 Product name: HYSOL 9340 EPK 2.70Z KT HARD

### 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. 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: 102 °C (215.6 °F)

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.

IDH number: 702138 Product name: HYSOL 9340 EPK 2.70Z KT HARD

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	None	None	None	None
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
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.
Methylimidazole 1-	None	None	None	None
Diethylenetriamine	1 ppm TWA (SKIN)	None	None	None
Quartz (SiO2)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.	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:Viscous, LiquidColor:Green, Gray, BrownOdor:Strong, AmmoniacalOdor threshold:Not available.pH:Not applicableVapor pressure:1 mm hg (20 °C (68°F))

Vapor pressure:1 mm hg (20 °C (68°FBoiling point/range:206.6 °C (403.9 °F)Melting point/ range:Not available.Specific gravity:1.35

Vapor density:

Flash point:

Flammable/Explosive limits - lower:

Flammable/Explosive limits - upper:

Autoignition temperature:

Evaporation rate:

Not available.

Not available.

Not available.

Solubility in water: Not miscible or difficult to mix

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

IDH number: 702138

**VOC content:** < 0.05 % (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)
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	No	No	No
Talc	No	No	No
Triethylenetetramine	No	No	No
Silicon dioxide	No	No	No
Methylimidazole 1-	No	No	No
Diethylenetriamine	No	No	No
Quartz (SiO2)	Known To Be Human Carcinogen.	Group 1	No

Hazardous components	Health Effects/Target Organs	
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	No Records	
Talc	Irritant, Lung, Some evidence of carcinogenicity	
Triethylenetetramine	Allergen, Corrosive, Developmental, Irritant, Mutagen	
Silicon dioxide	Nuisance dust	
Methylimidazole 1-	Allergen, Developmental, Gastrointestinal, Liver, Reproductive	
Diethylenetriamine	Allergen, Irritant, Eyes	
Quartz (SiO2)	Immune system, Lung, Some evidence of carcinogenicity	

# 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 regulatedHazard class or division:NoneIdentification number:NonePacking group:None

#### International Air Transportation (ICAO/IATA)

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

IDH number: 702138 Product name: HYSOL 9340 EPK 2.70Z KT HARD

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated

Hazard class or division:
Identification number:
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:
CERCLA/SARA Section 311/312:
CERCLA/SARA 313:

None above reporting de minimus
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.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

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

IDH number: 702138 Product name: HYSOL 9340 EPK 2.70Z KT HARD