

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: AQUA MARINE EPOXY  
Product Type: EPOXY HARDENER

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	%	Exposure Limits
Silica, quartz	14808-60-7	30-60	TWA: 0.05 mg/m3 ACGIH respirable TWA: 10 mg/m3 OSHA respirable
Aliphatic amine	Proprietary	10-30	Not established.
Benzyl alcohol	100-51-6	10-30	Not established.
Phenol, 2,4,6-tris[(dimethylamino)methyl]	90-72-2	5-10	Not established.
Formaldehyde, polymer with toluene	25155-81-1	5-10	Not established.
N-Isotridecyloxypropyl-trimethylene diamine	68479-04-9	1-5	Not established.
Silica, amorphous (fumed)	7631-86-9	1-5	TWA: 10 mg/m3 ACGIH total TWA: 3 mg/m3 ACGIH respirable TWA: 6 mg/m3 Other TWA: 3 mg/m3
Propylene glycol	57-55-6	1-5	Not established.
Isophoronediamine	2855-13-2	1-5	Not established.

3. HAZARDS IDENTIFICATION

\*\*\*\*EMERGENCY OVERVIEW\*\*\*\*

PHYSICAL STATE: Paste. COLOR: Gray ODOR: Fishy

DANGER! CAUSES EYE AND SKIN BURNS.  
HARMFUL IF ABSORBED THROUGH SKIN.  
MAY CAUSE ALLERGIC SKIN REACTION.  
MAY BE HARMFUL IF SWALLOWED.  
MAY CAUSE RESPIRATORY TRACT IRRITATION

Potential Health Effects

Eye:

Causes eye burns. Blurred vision. Excess tearing. Pain and discomfort. Tissue damage.

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Product Name: AQUA MARINE EPOXY

## Skin:

Harmful if absorbed through the skin. Allergic skin reaction.  
Itching. Rash. Causes skin burns. Pain and discomfort. Tissue  
damage.

## Ingestion:

May be harmful if swallowed.

## Inhalation:

Moderate respiratory tract irritation. Shortness of breath. Coughing.

## Conditions Aggravated by Exposure:

Respiratory disorders. Skin disorders. Eye disorders.

## Chronic:

Detailed information provided in section 11.

## 4. FIRST AID MEASURES

## Eye:

Immediately flush with plenty of water. After initial flushing remove  
any contact lenses and continue flushing for at least 15 minutes. Have  
eyes examined and tested by medical personnel

## Skin:

Immediately flush skin with plenty of water (using soap, if available)  
for at least 15 minutes while removing contaminated clothing and shoes.  
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  
immediately.

## Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel.  
Never give anything by mouth to an unconscious person. Get medical  
attention.

## Inhalation:

If symptoms occur, remove to fresh air. Oxygen may be administered if  
breathing is difficult. Seek medical attention if symptoms persist.

## Note to Physician:

None.

## 5. FIRE FIGHTING MEASURES

## Flash Point:

CLOSED CUP : 200.F (93.C). Pinsky-Martens.

## Extinguishing Media:

Use alcohol foam, water spray or fog, CO2, Dry chemical

## Flammable Limits:

Not applicable.

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Special Fire Fighting Procedures:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use water to cool exposed containers. Water stream directed into fire may cause frothing with subsequent spread of flame.

Hazardous Combustion Products:

Oxides of carbon. Oxides of nitrogen. Ammonia. Combustion under oxygen-starved conditions may produce numerous toxic products including nitriles, cyanic acid, isocyanates, amides, cyanogens, carbamates.

Unusual Fire or Explosion Hazards:

Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak:

Wear appropriate protective equipment and clothing during clean-up. Absorb spill with inert material. Sweep or shovel into loosely covered waste container and remove to appropriate waste area. Dispose of collected material according to regulation. Decontaminate or dispose of contaminated clothing and articles. Wash spill area with soap and water

7. HANDLING AND STORAGE

Handling:

Avoid breathing dust. Do not swallow. Do not get on skin. Avoid contact with eyes, skin, and clothing. Do not get in eyes. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Storage:

Keep container tightly closed. Keep in a cool and well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.

Eye/Face Protection:

Chemical splash goggles or safety glasses with side shields. Full face shield should be used if the potential exists for splashing or spraying of product.

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Skin Protection:

Clean clothing to cover skin. Neoprene gloves. Nitrile gloves. Butyl gloves. Viton Gloves

Respiratory Protection:

None normally required under general ventilation. If TLV?PEL is exceeded, if use is performed in a poorly ventilated space, or if inhalation effects occur, use NIOSH approved vapor cartridge respirator in accordance with applicable health and safety regulations and manufacturers recommendations.

See Section 2 COMPOSITION/INFORMATION ON INGREDIENTS for exposure limits

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Gray  
Material State: Paste.  
Odor: Fishy  
Boiling point: Not applicable.  
pH: Not applicable.  
Solubility in Water: Slightly soluble  
Specific gravity: 1.5154  
VOC: 0.049% (Resin and Hardener mixed)  
Vapor Pressure: Not applicable.  
Vapor density: >1 (Air = 1)  
Evaporation Rate: <1 compared to Butyl acetate.

## 10. STABILITY AND REACTIVITY

Stability:

Stable.

Conditions to Avoid:

None known

Incompatibility:

Strong Lewis or mineral acids. Strong bases or oxidants Chlorinated rubber. Reaction with epoxy resins and isocyanates in large amounts or under uncontrolled conditions releases considerable heat and may release acrid fumes. Reaction with some nitrates or nitrites can cause the formation of cancer causing nitrosamines.

Hazardous Polymerization:

Will not occur.

Hazardous Decomposition Products:

None known

## 11. TOXICOLOGY INFORMATION

Product Toxicology Data:

Not available.

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Product Name: AQUA MARINE EPOXY

Ingredient	Carcinogen		OSHA
	NTP	IARC	
Silica, quartz	1	1	+
Propylene glycol	No	No	No
Aliphatic amine	No	No	No
Benzyl alcohol	No	No	No
Phenol, 2,4,6-tris[ (dimethylamino)methyl]	No	No	No
Formaldehyde, polymer with toluene	No	No	No
Isophoronediamine	No	No	No
N-Isotridecyloxypropyl- trimethylene diamine	No	No	No
Silica, amorphous (fumed)	No	No	No
Isophoronediamine	No	No	No
Propylene Glycol	No	No	No

## Key to abbreviations:

NTP 1 - Known carcinogen. IARC 1 - Carcinogenic to human. IARC N/A - Not applicable. OSHA + - Proven.

Ingredient	Health Effects/Target organs
Silica, quartz	Lung. Immune system. Some evidence of carcinogenicity.
Aliphatic amine.	No data.
Propylene glycol	Irritant.
Benzyl alcohol	Allergen. Corrosive. Irritant. Central nervous system.
Isophoronediamine	Irritant. Allergen. Corrosive. Lung.
Silica, amorphous (fumed)	Nuisance dust.
Formaldehyde, polymer with toluene	No Records.
Substituted phenol	Irritant. Allergen.
Phenol, 2,4,6-tris[ (dimethylamino)methyl]	Irritant. Allergen.
Formaldehyde, polymer with toluene	No records
N-Isotridecyloxypropyl- trimethylene diamine	No target organs.

## 12. ECOLOGICAL INFORMATION

## Ecological Information:

None known

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13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal:

Dispose according to EPA and local governmental regulations.

EPA Hazardous Waste Number:

Not applicable.

14. TRANSPORTATION INFORMATION

Domestic Transportation (D.O.T. 49 CFR)-GROUND

Shipping Description:

Shipping name: Polyamines, Solid, Corrosive, NOS (Aliphatic amine, Isophoronediamine)

Class/Division: 8

IDENTIFICATION Number: UN3259

Packing group: III

Exceptions:

None.

International Air Transportation (ICAO/IATA)-

Shipping description:

Shipping name: Polyamines, Solid, Corrosive, NOS (Aliphatic amine Isophoronediamine)

Class/Division: 8

Identification Number: UN3259

Packing group: III

Exceptions:

None.

Water Transportation (IMO/IMDG):

Shipping name: Polyamines, Solid, Corrosive, NOS (Aliphatic amine Isophoronediamine)

Class/Division: 8

Identification Number: UN3259

Packing group: III

Marine pollutant:

None known

15. REGULATORY INFORMATION

SARA Title III Section 313 Chemicals: None above reporting de minimus.

SARA Title III Section 311/312: Immediate Health Hazard, Delayed Health Hazard

Toxic Substances Control Act:

All components are listed on or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA Section 12(b) annual:

None.

TSCA Section 12(b) one time:

None.

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Product Name: AQUA MARINE EPOXY

Canadian Inventory Status:

All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

California Proposition 65:

This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

16. OTHER INFORMATION

NFPA Code:

Health: 3  
Flammability: 1  
Reactivity: 0  
Special: Corrosive

HMIS Code:

Health: 3 \*  
Flammability: 1  
Reactivity: 0  
Protective Equipment: See Section 8.

Prepared by:

Regulatory Affairs - North America,  
Henkel Consumer Adhesives Inc. 32150 Just Image Dr, Avon, OH, 44011  
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## MATERIAL SAFETY DATA SHEET

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## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: AQUA MARINE EPOXY  
Product Type: Epoxy resin

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	%	Exposure Limits
Epoxy resin	25068-38-6	30-60	Not established.
Silica, quartz	14808-60-7	10-30	TWA: 0.05 mg/m3 ACGIH respirable TWA: 10 mg/m3 OSHA Respirable
Calcium carbonate	471-34-1	10-30	TWA: 10 mg/m3 ACGIH total TWA: 15 mg/m3 OSHA total TWA: 5 mg/m3 OSHA respirable
Titanium dioxide	13463-67-7	1-5	TWA: 10 mg/m3 ACGIH TWA: 5 mg/m3 TWA: 15 mg/m3 OSHA total

## 3. HAZARDS IDENTIFICATION

\*\*\*\*EMERGENCY OVERVIEW\*\*\*\*

PHYSICAL STATE: Paste. COLOR: White. ODOR: Mild.

CAUTION! MAY CAUSE ALLERGIC SKIN REACTION.  
MAY BE HARMFUL IF SWALLOWED.  
MAY CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION.

## Potential Health Effects

## Eye:

Moderate eye irritation. Redness. Excess tearing. Contact with epoxy resin at elevated temperatures may cause thermal burns. May cause eye injury.

## Skin:

Allergic skin reaction. Itching. Moderate skin irritation. Redness. Contact with epoxy resin at elevated temperatures may cause thermal burns.



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Product Name: AQUA MARINE EPOXY

## Ingestion:

May be harmful if swallowed. Nausea. Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract if swallowed.

## Inhalation:

Mild respiratory tract irritation. Coughing. Vapors and mist will irritate nose and throat and possibly eyes. Dust from solid adhesive may cause irritation.

## Conditions Aggravated by Exposure:

Skin disorders. Eye disorders. Skin allergies. Lung allergies.

## Chronic:

Detailed information provided in section 11.

## 4. FIRST AID MEASURES

## Eye:

Immediately flush eyes with plenty of water for at least 15 minutes.  
Get medical attention.

## Skin:

Immediately flush skin with plenty of water (using soap, if available) for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.

## Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

## Inhalation:

Remove to fresh air. If symptoms develop and persist, get medical attention.

## 5. FIRE FIGHTING MEASURES

## Flash Point:

CLOSED CUP : 400.F (204.C). Pensky-Martens.

## Extinguishing Media:

In case of fire, use water spray (fog), foam, dry chemicals, or CO2.

## Flammable Limits:

Not applicable.

## Special Fire Fighting Procedures:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use water to cool exposed containers. Water stream directed into fire may cause frothing with subsequent spread of flame.

## Hazardous Combustion Products:

Oxides of carbon. Acids. Organic compounds. Phenolics. Irritating and toxic fumes. Aldehydes.

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Product Name: AQUA MARINE EPOXY

Unusual Fire or Explosion Hazards:

Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak:

Scrape up as much material as possible. Clean residue with solvent or soap and water. Store in a closed container until disposal.

7. HANDLING AND STORAGE

Handling:

Do not swallow. Avoid contact with eyes. Avoid contact with skin and clothing. Wash thoroughly after handling.

Storage:

Keep container tightly closed. Keep in a cool and well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Not normally needed. Use local exhaust ventilation if the potential for airborne exposure exists.

Eye/Face Protection:

Chemical splash goggles or safety glasses with side shields.

Skin Protection:

Use chemical resistant, impermeable gloves.

Respiratory Protection:

Use NIOSH approved respirator if there is potential to exceed any exposure limit(s).

See Section 2 COMPOSITION/INFORMATION ON INGREDIENTS for exposure limits

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	White.
Material State:	Paste.
Odor:	Mild.
Boiling point:	Not applicable.
pH:	Not applicable.
Solubility in Water:	Insoluble
Specific gravity:	1.6357
VOC:	0.049% (resin and hardener mixed)
Vapor Pressure:	Not applicable.

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Product Name: AQUA MARINE EPOXY  
 Vapor density: >1 (Air = 1)  
 Evaporation Rate: <1 compared to Butyl acetate.

10. STABILITY AND REACTIVITY

Stability: Stable.  
 Conditions to Avoid: None known  
 Incompatibility: Strong oxidizing agents. Strong Lewis acids. Strong mineral acids. Strong mineral bases. Strong organic bases, especially primary and secondary aliphatic amines. Mercaptans  
 Hazardous Polymerization: Will not occur.  
 Hazardous Decomposition Products: None known

11. TOXICOLOGY INFORMATION

Product Toxicology Data: Not available.

Ingredient	Carcinogen		
	NTP	IARC	OSHA
Epoxy resin	No	No	No
Silica, quartz	1	1	+
Calcium carbonate	No	No	No
Titanium dioxide	No	No	No

Key to abbreviations:  
 NTP 1 - Known carcinogen. IARC 1 - Carcinogenic to human. OSHA + - Proven.

Ingredient	Health Effects/Target organs
Epoxy resin	Allergen. Irritant.
Silica, quartz	Lung. Immune system. Some evidence of carcinogenicity.
Calcium carbonate	Nuisance dust.
Titanium dioxide	Irritant. Respiratory.

12. ECOLOGICAL INFORMATION

Ecological Information: None known

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Product Name: AQUA MARINE EPOXY

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal:

Dispose according to EPA and local governmental regulations.

EPA Hazardous Waste Number:

Not hazardous.

14. TRANSPORTATION INFORMATION

Domestic Transportation (D.O.T. 49 CFR)-GROUND

Shipping Description:

Not regulated.

Exceptions:

Not applicable.

International Air Transportation (ICAO/IATA)-

Shipping description:

Not regulated.

Exceptions:

Not applicable.

Marine pollutant:

None known

15. REGULATORY INFORMATION

SARA Title III Section 313 Chemicals:

None.

SARA Title III Section 311/312:

Immediate health hazard, Delayed health hazard

Toxic Substances Control Act:

All components are listed on or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA Section 12(b) annual:

None.

TSCA Section 12(b) one time:

None.

Canadian Inventory Status:

All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

California Proposition 65:

This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

16. OTHER INFORMATION

NFPA Code:

Health: 2  
Flammability: 1  
Reactivity: 0  
Special: None

HENKEL CONSUMER ADHESIVES

08/02/05

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Product Name: AQUA MARINE EPOXY

HMIS Code:

Health: 2 \*  
Flammability: 1  
Reactivity: 0  
Protective Equipment: See Section 8.

Prepared by:

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