



Material Safety Data Sheet

Product: Kevlar Reinforced Wet Curing Epoxy

MSDS Date: 07-01-2008
Product Name: Kevlar Reinforced Wet Curing Epoxy
Product Code: Sub-Sea Epoxy Part B
Manufacturer: Neptune Research, Inc.

I. Product and Company Description

Neptune Research, Inc.
1683 Latham Rd.
West Palm Beach, FL 33409

Emergency Phone Number:
800-535-5053

For Product Information:
(561) 683-6992

Product Description:
Epoxy Coating Component

Product Use:
Corrosion control, Sealant, Coating and Patching

Chemical Name or Synonym:
NA

Molecular Formula:
NA

II. Chemical Composition

Component	CAS#	%Composition
Micronized Silica	14808-60-7	20-50
Trade Secret Resins	Trade Secret	20-50
Benzyl Alcohol	100-51-6	12-24
2,4,6-tri(dimethylaminomethyl)phenol	90-72-2	1-2



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III. Hazards Identification

A. Emergency Overview:

Physical Appearance and Odor:

White paste with ammonia odor

B. Potential Health Effects:

Acute Eye:

May cause eye irritation or burns. May cause permanent visual impairment.

Acute Skin:

Exposure may cause skin irritation and burns.

Acute Inhalation:

May cause irritation of the respiratory tract.

Acute ingestion:

May cause gastrointestinal irritation if swallowed.

Chronic effects:

The micronized silica contained in this formula is completely bound and wetted by the resinous components so exposure during normal application by brush or spreader is not possible. It is possible however that free silica would become airborne during sanding or abrasive blasting operations. Excessive inhalation of dusts containing silica may result in the development of disabling pulmonary fibrosis known as Silicosis. There is sufficient evidence in humans for the Carcinogenicity of inhaled crystalline silica in the form of quartz from occupational sources.

Medical Conditions Aggravated by Exposure:

Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product, exercise caution in handling. Remove from skin using liquid soap or detergent - always avoid using solvents to remove skin contamination.

IV. First Aid Measures

First Aid Measures for Accidental:

Eye Exposure:

Hold lids apart and immediately flush eyes with plenty of water for at least 15 minutes. Seek medical advice.



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Skin Exposure:

Remove from skin using soap and water. Avoid using solvents to remove any skin contamination. Remove contaminated shoes and clothing. DO NOT APPLY GREASES OR OINTMENTS. Victims of a major skin contact should remain under medical observation for at least 24 hours due to possible delayed effects.

Inhalation:

In normal use inhalation is extremely unlikely. If breathing has stopped or is labored give mouth-to-mouth assistance, prevent aspiration of vomit, move to fresh air, and call a physician.

Ingestion:

In the event of ingestion, administer 3-4 glasses of water. Do not induce vomiting. Seek medical advice.

Notes to Physician:

This product is highly injurious to all tissues, similar to that of ammonia. Chemical pneumonitis, pulmonary edema, laryngeal edema and delayed scarring of the airway or other affected tissue may occur following exposure. Clinical management is based on supportive treatment similar to that used for thermal burns.

V. Fire Fighting Measures

Fire Hazard Data:

Flash Point: >200°F

Method Used: TCC

Flammability Limits (vol/vol%): Lower: NA Upper: NA

Extinguishing Media:

Water Spray, Foam, Dry Chemical, Dry Sand or Limestone.

Special Fire Fighting Procedures:

Use self-contained breathing apparatus, and full protective equipment.

Unusual Fire and Explosion Hazards:

None

Hazardous Decomposition Materials (Under Fire Conditions):

Decomposition and combustion may release toxic substances.



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VI. Accidental Release Measures

Cleanup and Disposal of Spill:

Avoid contact with skin and eyes. Scrape or wipe up spilled material. Collect in suitable and properly labeled containers. Dispose of materials according to the applicable Federal, State, or local regulations.

VII. Handling and Storage

Handling:

Avoid contact with eyes, skin or clothing. Use with good ventilation. Wash after handling and before eating, drinking or smoking.

Storage:

Store in cool dry area in closed containers.

VIII. Exposure Controls / Personal Protection

Exposure Guidelines:

Component	Exposure limits		
	ACGIH	NIOSH	OSHA-PELs
Micronized Silica	ND	ND	0.1 mg/m3
Trade Secret Resins	ND	ND	ND
Benzyl Alcohol	ND	ND	0.1 mg/m3
2,4,6-tri(dimethylaminomethyl)phenol	ND	ND	5 ppm

Engineering Controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Respiratory Protection:

None normally required. In case of inadequate ventilation use NIOSH-approved respirator.

Eye / Face Protection:

Wear appropriate safety glasses with side shields or chemical goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166. A safety shower and eye facility should be available.

Skin Protection:

Chemical resistant gloves (e.g. neoprene). For operations where extensive or prolonged contact may occur, coveralls and rubber foot coverings are recommended.



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IX. Physical and Chemical Properties

Physical Appearance:	White Paste
Odor:	Ammonia odor
Boiling Point:	NA
pH:	ND
Specific Gravity:	1.56
Water Solubility:	Negligible
Melting Point Range:	ND
Vapor Pressure:	ND
Percent Volatiles by Volume:	0.5

X. Stability and Reactivity

Chemical Stability:

Stable under standard use and storage conditions.

Conditions to Avoid:

Mixing large volumes with epoxy curing agents such as SUB01 Part B. Volumes of one gallon are safe however expect a significant exotherm within 15 - 20 minutes at 70°F.

Materials / Chemicals to be Avoided:

Acids, (e.g. Sulfuric, Phosphoric, Acetic, Citric etc.). Oxidizing and reducing agents (e.g. Perchlorates, nitrates, Hydrides and sulfites etc.)

Hazardous Decomposition Products:

Fumes produced when heated may include oxides of carbon, nitrogen oxides, aldehydes, nitrosamines, amines, ammonia, organic acid vapors and unspecified others.

Hazardous Polymerization:

Will not occur



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XI. Toxicological Information

Acute Effects:

ND

Acute Eye Irritation:

May cause eye irritation or burns. May cause permanent visual impairment. .

Acute Skin Irritation:

Exposure may cause skin irritation and burns.

Acute Dermal Toxicity:

May cause sensitization and dermatitis.

Acute Respiratory Irritation:

May cause irritation of the respiratory tract.

Acute Ingestion Toxicity:

May cause gastrointestinal irritation if swallowed.

Acute Inhalation Toxicity:

Not Determined

Acute Oral Toxicity:

Not Determined

Chronic Toxicity:

Not Determined

Mutagenicity:

Not Determined

XII. Ecological Information

Ecotoxicological Information:

Not Determined

Chemical Fate Information:

Not Determined

XIII. Disposal Considerations

Waste Disposal Method:

Scrape or wipe up spilled material. Place in container for recovery or disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.



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Container Handling and Disposal:

Dispose of container and unused contents in accordance with federal, state, and local regulations.

XIV. Transportation Information

US Department of Transportation Shipping Name:

US Department of Transportation	Proper Shipping Name	Not Regulated
	Hazard Class	Not Regulated
	ID Number	Not Regulated
	Packaging Group	Not Regulated
	Label Statement	Not Regulated

XV. Regulatory Information

Federal Regulations:

SARA Title III Hazard Classes:

Fire Hazard:	NO
Reactive Hazard:	NO
Release of Pressure:	NO
Acute Health Hazard:	YES
Chronic Health Hazard:	NO

Other Federal Regulations:

State Regulations:

None

California Prop. 65: None.

XVI. Other Information

National Fire Protection Association Hazard Ratings – NFPA(R):

Health Hazard:	2
Flammability:	1
Reactivity:	0

Key Legend Information:



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N/A – Not Applicable

ND – Not Determined

ACGIH – American Conference of Governmental Industrial Hygienists

OSHA – Occupational Safety and Health Administration

TLV – Threshold Limit Value

PEL – Permissible Exposure Limit

TWA – Time Weighted Average

STEL – Short Term Exposure Limit

NTP – National Toxicology Program

IARC – International Agency for Research on Cancer

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