

Safety Data Sheet
Syntho-Steel™

Section 1 Product and Company Information

Product Name: Syntho-Steel
Supplier: NRI 3875 Fiscal Court, Ste #100
 Riviera Beach, FL 33404
 (561) 683-6992

Emergency Phone Number: 800-535-5053
Product Description: Putty solution
Product Use: Intended to repair pipes.
Chemical Name or Synonym: N/A

Section 2 Hazards Identification

Classification of the substance or mixture

Skin corrosion/irritation – Category 2
 Eye damage/eye irritation – Category 2A
 Skin sensitization - Category 1
 Chronic Aquatic Toxicity – Category 2



Hazard Statements:

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H411 Toxic to aquatic life with long lasting effects

Signal Word: Warning

Precautionary Statement:

P280 Wear protective gloves
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: get medical attention.
 P501 Dispose of contents and container in accordance with all local, regional, national and international regulations.

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

Health Hazard: 2
 Flammability: 1
 Reactivity: 0

Section 3 Composition/Information on Ingredients

Component	CAS#	%Composition
Bisphenol A (epichlorhydrin) epoxy resin	25068-38-6	10-30

Safety Data Sheet
Syntho-Steel™

Crystalline silica non-respirable	14808-60-7	0.1-1
Talc, not containing asbestiform fibres	14807-96-6	30-60
Glass, oxide, chemicals	65997-17-3	10 - 30
Nepheline syenite	37244-96-5	1 - 5

Section 4 First Aid Measures

First Aid Measures for Accidental:

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Eye Exposure: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Skin Exposure: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Most important symptoms/effects, acute and delayed:

Inhalation: No known significant effects or critical hazards.

Skin contact: Causes skin irritation. May cause an allergic skin

Eye contact: Causes serious eye irritation.

Ingestion: Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms:

Inhalation: No specific data

Skin contact: Adverse symptoms may include irritation, redness

Eye contact: Adverse symptoms may include pain or irritation, watering, redness

Ingestion: No specific data

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5 Fire Fighting Measures

Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Special Fire Fighting Procedures: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special Protective Equipment for Fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Specific hazard arising from the chemical: No specific fire or explosion hazard

Safety Data Sheet
Syntho-Steel™

Hazardous Decomposition Materials (Under Fire Conditions): Decomposition products may include carbon dioxide, carbon monoxide, sulfur oxides, halogenated compounds, metal oxides

Section 6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Cleanup and Disposal of Spill:

Small spill: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7 Handling and Storage

Precautions for Safe Handling: Wash hands thoroughly after handling, especially before eating, drinking, smoking and using restroom facilities. Wash contaminated goggles, face shield, and gloves. Remove contaminated clothing. Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage including any incompatibilities: Do not store above the following temperature: 35°C (95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8 Exposure Controls / Personal Protection

Exposure Guidelines:

Component	Exposure limits		
	ACGIH	NIOSH	OSHA-PELs
Silica, crystalline quartz	TLV 0.025 mg/m ³ (TWA respirable)	0.05mg/m ³ (respirable dust)	30 mg/m ³ TWA (total dust) 10 mg/m ³ TWA (respirable)

Appropriate Engineering Controls: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal Protective Equipment:

Respiratory Protection: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Safety Data Sheet
Syntho-Steel™

Eye / Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9 Physical and Chemical Properties

Physical Appearance:	Grey/black putty	
Odor:	Sulfur/pungent.	
Odor Threshold:	Not available	
pH:	Not available	
Flash Point:	>93.3 °C (>199.9 °F)	
Method Used:	Closed cup	
Flammability (solid, gas):	Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge	
Flammability Limits (vol/vol%):	Lower: N/A	Upper: N/A
Melting Point Range:	Not available	
Boiling point:	Not available	
Evaporation Rate:	<1 (Butyl Acetate = 1)	
Specific Gravity:	Not available	
Viscosity:	Not available	
Solubility:	Not available	
Water Solubility:	Not available	
Vapor Pressure:	Not available	
Vapor Density:	Not available	
Relative Density:	2.247	
Partition coefficient (n-octanol/water):	Not available	
Auto-ignition Temperature:	Not available	
Decomposition Temperature:	>200 °C (>392 °F)	

Section 10 Stability and Reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Hazardous Polymerization: Will not occur

Chemical Stability: Stable under standard use and storage conditions.

Possibility of Hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: No specific data

Incompatible Materials/Chemicals: No specific data

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Safety Data Sheet
Syntho-Steel™

Section 11 Toxicological Information

Ingredient	Results	Species	Exposure
bisphenol-A-(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	100 milligrams
	Skin - Moderate irritant	Rabbit	24h 500 microliters
	Skin - Severe irritant	Rabbit	24 h 2 milligrams

Potential Acute Health Effects

Acute Eye Irritation: Causes serious eye irritation.

Acute Skin Irritation: Causes skin irritation. May cause an allergic skin reaction.

Acute Ingestion Toxicity: May cause irritation of intestinal tract.

Acute Inhalation Toxicity: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics:

Eye contact: Adverse symptoms may include pain or irritation, watering, redness

Inhalation: No specific data

Skin contact: Adverse symptoms may include irritation, redness

Ingestion: No specific data

Chronic Health Effects:

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Mutagenicity: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Short term exposure: No specific data.

Long term exposure: No specific data

Section 12 Ecological Information

Ecotoxicity: No specific data

Persistence and degradability: No specific data

Bioaccumulative potential:

Component	LogPow	BCF	Potential
Bisphenol A (epichlorhydrin)	2.64 to 3.78	31	low

Mobility in soil: No available

Other adverse effects: No known significant effects or critical hazard

Section 13 Disposal Considerations

Waste treatment methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal

Safety Data Sheet
Syntho-Steel™

legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Uncleaned packagings: Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14 Transport Information

IATA

UN-Number: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. ★
Hazard Class: 9
Packing Group: III
Special Provisions:

A97
 A158
 A197 (375) These substances when transported in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

IMDG/IMO
UN-Number: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.
Hazard Class: 9
Packing Group: III

ERG Code: 9L

Section 15 Regulatory Information

Federal Regulations:
 TSCA 8(a) PAIR: Siloxanes and silicones, di-Me, reactions products with silicanonylphenol
 TSCA 8(a) CDR Exempt/Partial exemption: Not determined
 United States inventory (TSCA 8b): All components are listed or exempted.

State Regulations:
California Prop. 65: This product contains some chemicals known to the State of California to cause cancer.

Ingredient	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Talc	Yes	No	No	No
Crystalline silica non-respirable	Yes	No	No	No

Safety Data Sheet
Syntho-Steel™

Massachusetts: The following components are listed: soapstone, mineral wool fiber

New York and Minnesota: None of the components are listed.

New Jersey: The following components are listed: soapstone; silica, quartz; quartz (SiO₂); ferrosilicon, ferrocerium.

Pennsylvania: The following components are listed: soapstone dust; quartz (SiO₂)

International Regulations:

Canada inventory: All components are listed or exempted.

Australia inventory (AICS): Not determined.

China inventory (IECSC): Not determined.

Japan inventory: Not determined.

Korea inventory: Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

Taiwan inventory (CSNN): Not determined.

Section 16 Other Information

Key Legend Information:

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

NIOSH - National Institute for Occupational Safety and Health

The information contained herein is based on the data available to us and is believed to be accurate. The data is offered in good faith as typical values and not as product specification. The information in this data sheet was compiled from information supplied by the vendors of the components of this compound. NRI makes no warranty either expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. The recommended industrial hygiene and safe handling procedures are believed to be genuinely applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. NRI assumes no responsibility for injury from the use of the product described herein. The information is intended only to assist in the safe handling of this material.

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