

SYNTHOCOAT 500

Section 1. Product and Company Identification

Product Name: SynthoCoat 500

Supplier: CSNRI | 621 Lockhaven Drive. Houston, TX 77073 | +1 281.590.8491

Emergency Phone Number: 800.424.9300 (CHEMTREC)

+1 703.741.5970 (Outside the US)

Product Description: Epoxy solution

Product Use: Reinforcement Coating for Corrosion Protection

Chemical Name or Synonym: N/A

Section 2. Hazards Identification

Classification of the substance or mixture

Flammable Liquids – Category 3

Acute Toxicity - Dermal - Category 4

Skin Corrosion / Irritation - Category 2

Eye Damage / irritation - Category 2

Acute Toxicity - Inhalation - Category 4

Reproductive Toxicity - Category 1

Specific Target Organ Toxicity (single exposure) (Respiratory Tract Irritation) - Category 3

Specific Target Organ Toxicity (repeated exposure) - Category 1

Aspiration Hazard - Category 1

Label Elements:



Signal Word: Danger **Hazard Statements:**

H226 Flammable liquid and vapor

H312 Harmful in contact with skin

H315 Causes skin irritation

H319 Causes serious eye irritation

H332 Harmful if inhaled

H360 May damage fertility of unborn child

H304 May be fatal if swallowed and enters airways

H335 May cause respiratory irritation

H372 Cause damage to organs through prolonged or repeated exposure

Precautionary Statement:

P280 Wear protective gloves

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty water.



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P332+P313 If skin irritation occurs: Get medical advice/attention.

P304+P340 IF INHALED: Remove person t fresh air and keep comfortable for breathing.

Section 3. Composition/Information on Ingredients

Component	CAS#	Weight %
Xylene-mixed ortho, meta and para isomers	1330-20-7	30 – 60
Manganese ferrite black spinel	68186-94-7	5 – 10
Mica	12001-26-2	1 – 5
Ethylbenzene	100-41-4	0.1 – 1
Carbon black	1333-86-4	0.1 – 1
Cobalt 2-ethylhexanoate	136-52-7	0.1 – 1
Zirconium 2-ethylhexanoate	22464-99-9	0.1 – 1

Section 4. First Aid Measures

First Aid Measures for Accidental:

Inhalation: If inhaled remove to fresh air.

Ingestion: If swallowed do not induce vomiting. Rinse mouth with water. Obtain medical attention.

Eye contact: In case of contact, rinse thoroughly with plenty of water, also under the eyelids for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

Skin contact: Remove contaminated clothing and shoes. Wash affected skin with soap and plenty of warm water. Do not reuse contaminated clothing until cleaned.

Most important symptoms/effects, acute and delayed:

Eye contact: Liquid, aerosols or vapors are severely irritating and can cause pain, tearing, Reddening and swelling. If left untreated, corneal damage can occur and injury is slow To heal. However, damage is usually reversible

Skin contact: Repeated or prolonged skin contact can result in dry, defatted and cracked skin causing increased susceptibility to infection. In addition, irritation may develop into dermatitus. Solvents can penetrate the skin and may cause effects similar to those identified under acute inhalation symptoms.

Inhalation: Solvent vapors are irritating to the eyes, nose, and throat. Symptoms of Irritation may include red, itchy eyes, dryness of the throat and a feeling of tightness in the chest. Other possible symptoms of overexposure include headache, dizziness, nausea, Narcosis fatigue and loss of appetite.

Ingestion: Can result in irritation of the digestive tract. Symptoms can include sore throat Abdominal pain nausea, vomiting and diarrhea. Vomiting may cause aspiration of solvent Resulting in chemical pneumonitis.

Indication of immediate medical attention and special treatment needed: No information available.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: For suitable extinguishing media, use Alcohol-resistant foam (on small fires), carbon dioxide, dry chemical, water spray.

Unsuitable Extinguishing Media: No data available

Special Fire Fighting Procedures:



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Special Protective Equipment and Precautions for Fire-fighters: Burning produces irritant fumes. Exposure to decomposition products may be a hazard to health. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Full protective flameproof clothing.

Specific Hazards Arising from the Chemical (Under Fire Conditions): Carbon oxide and carbon dioxide.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Do not touch or walk through spilled material. Provide adequate ventilation. Wear respirator and personal protective equipment as appropriate to prevent skin and eye contact. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

Environmental Precautions: Material should not be released into the environment. Prevent product from entering drains.

Methods and Materials for Containment and Cleaning Up: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Large spills should be collected mechanically (remove by pumping) for disposal. Dam up.

Section 7. Handling and Storage

Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Handle in accordance with good industrial hygiene and safety practice. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Purge containers with dry nitrogen before resealing. Do not use spot heating devices such as band heaters or torches. Make sure contents are completely liquid and uniform before using.

Conditions for safe storage including any incompatibilities: Avoid temperature extremes. Store away from excessive heat, from sources of Ignition and from reactive materials. Material can burn; limit indoor storage to areas Equipped with automatic sprinklers. Store out of direct sunlight in a cool place. Keep Containers tightly closed. Ground all metal containers during storage and handling.

Section 8. Exposure Controls / Personal Protection

Control Parameters (Exposure Limits):

Component	Exposure limits	
Component	OSHA	ACGIH
Xylene-mixed ortho, meta and para isomers	100 TWA / 150 STEL	100 TWA / 150 STEL
Ethylbenzene	100 TWA / 125 STEL	100 TWA / 125 STEL
Mica	3mg/m ³ TWA	3mg/m3 TWA
Carbon black	3.5 mg/m ³ TWA	3.5 mg/m ³ TWA
Cobalt 2-ethylhexanoate	0.1 mg/m ³ TWA	0.02 mg/m ³ TWA
Zirconium 2-ethylhexanoate	5 mg/m³ TWA	10 mg/m ³ TWA



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Appropriate Engineering Control: Exhaust ventilation is sufficient to keep airborne concentration Of the solvents below their respective TLV's. Exhaust air may need to be cleaned by Scrubbers or filters to reduce environmental contamination.

Personal Protective Equipment:

Respiratory Protection: None required in adequately ventilated areas. If vapor Concentration exceeds 20ppm for longer than 15 minutes, a NIOSH approved respirator for Organic vapors is recommended.

Eye / Face Protection: Splash-proof goggles or chemical safety glasses.

Skin Protection: Permeation resistant impervious gloves. Cover as much of the exposed area as possible with protective clothing.

Additional protective measures: Long sleeved shirts and trousers. Emergency showers and Eye wash stations should be readily accessible.

Section 9. Physical and Chemical Properties

Physical State: Liquid Colour: Black

Odor: Aromatic solvent
Melting Point/ Freezing Point: No data available

Boiling point: > 132 °C (270 °F) (Xylene)

Flammability (solid, gas): No data available

Lower and Upper Explosion limits/

Flammability Limits: Lower: 1.1%; Upper: 6.6% Flash Point: 26.1 °C (79 °F) (Xylene)

432 °C (809.6 °F) **Auto-ignition Temperature: Decomposition Temperature:** No data available No data available :Ha **Kinematic Viscosity:** No data available Solubility: Insoluble in water **Evaporation rate (ether=1):** >1 (butyl acetate = 1) Flammability Limits in Air: No data available Solubility in other solvents: No data available Partition coefficient (n-octanol/water): No data available **Vapour Pressure:** 9 mm Hg at 77 °F **Density and/or Relative Density:** No data available **Vapour Density:** 3.1 (Air = 1)

Specific Gravity: 1.05 – 1.15

Partials Characteristics: No data evail

Particle Characteristics: No data available

% Solids by weight: 53 %

Section 10. Stability and Reactivity

Reactivity: Stable: however may form peroxides of unknown stability.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous reactions: Reactions with strong oxydizers may occur. Hazardous polymerization

will not occur.



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Conditions to Avoid: Not applicable (material is stable).

Incompatible Materials / Chemicals: Oxidizing agents (perchlorates, nitrates), strong Acids, hypochlorites, and peroxides should not be combined with phosphorous containing Materials because highly toxic fumes can be emitted in a fire situation.

Hazardous Decomposition Products: Carbon oxide, carbon dioxide.

Section 11. Toxicological Information

Information in the likely route of exposure:

Acute Toxcity:

Component	LD50 Oral	LC50 Inhalation
Xylene	4300 mg/kg (rat)	5000 ppm (rat), 4h
Ethylbenzene	3500 mg/kg (rat)	4000 ppm (rat), 4h

Irritation / Corrosion:

Component	Results	Species	Exposure
Xylene	Skin- mild irritant	Rat	8 hrs/ 60 microliters
	Skin- moderate irritant	Rabbit	24hrs/ 500 milligrams
Ethylbenzene	Skin- mild	Rabbit	24 HRS/ 15 milligrams
	Eye- severe	Rabbit	500 milligram

Carcinogenicity:

Component	IARC
Xylene	3
Ethylbenzene	2B

Potential acute health effects

Eye: causes serious eye irritation

Inhalation: can cause CNS depression, may cause drowsiness and dizziness, respiratory irritation.

Skin contact: causes skin irritation

Ingestion: can cause CNS depression may be fatal if swallowed

Potential chronic health effects

General: may cause damage to organs through prolonged and repeated exposure

Teratogenicity: yes Mutagenicity: no Embryotoxicity: no

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

Short term exposure: No data available. Long term exposure: No data available Numerical measures of toxicity: No data available



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Section 12. Ecological Information

Ecotoxicity: No determined

Component	Result	Species	Exposure
Ethylbenzene	LC50 96 hr – 32-97.1 mg/L	Freshwater fish	96 hrs

Persistence and degradability: No determined

Bioaccumulative potential: This substance is not considered to be persistent, bioaccumulating nor toxic

(PBT).

Mobility in soil: No determined

Other adverse effects: No determined

Section 13. Disposal Considerations

Waste treatment methods: Incineration is preferred. Comply with all federal, state and Local regulations. RCRA classified hazardous waste with characteristic of ignitability

Uncleaned packaging: Do not re-use empty containers for food, clothing, or products for human or animal consumption, or where skin contact can occur. Dispose of container and unused contents in accordance with federal, state, and local regulations.

Section 14. Transport Information

DOT

Proper Shipping Name: Paint
U.N. Number: UN 1263
Transport Hazard class: Class 3
Packing group: III

Environmental Hazard: No

Special provisions: Not Applicable. ERG No.128

TDG

Proper Shipping Name: Paint
U.N. Number: UN 1263
Transport Hazard class: Class 3
Packing group: III

Environmental Hazard: No

Special provisions: ERG No.128

<u>IATA</u>

Proper Shipping Name: Paint U.N. Number: UN 1263
Transport Hazard class: Class 3

Packing group: III Environmental Hazard: No

Special provisions: Not Applicable.



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<u>IMDG</u>

Proper Shipping Name:
U.N. Number:
UN 1263
Transport Hazard class:
Class 3
Packing group:
UN 1263
Class 3
III
Environmental Hazard:
No
Emergency Schedules (EmS):
F-E, S-E

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture TSCA (toxic substance control act): All components are listed in the TSCA chemical substance inventory. CERCLA (comprehensive response compensation and liability act): reportable quantity, Xylene 100 lbs. SARA Tittle III:

Section 312 hazard class: immediate (acute) health hazard, delayed health hazard; Fire hazard **Section 313 listed ingredients**: xylene (cas #001330-20-7), ethyl benzene (cas #000100-41-4), Manganese compounds

California proposition 65: the below list of compounds is known to the state of California to cause cancer, birth defects or other reproductive harm: CAS #000100-41-4 and CAS #001333-86-4.

Section 16. Other Information

Key Legend Information:

N/A - Not Applicable

ND - Not Determined

OSHA – Occupational Safety and Health Administration

NIOSH – National Institute for Occupational Safety and Health

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