

# SAFETY DATA SHEET



Date Issued : 3/10/2014  
SDS No : 125255

## Non-Corrosive Epoxy Curing Agent 4:1

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Non-Corrosive Epoxy Curing Agent 4:1  
**GENERAL USE:** Liquid thermoset resin for composite manufacture.  
**PRODUCT CODE:** 125255

#### MANUFACTURER

Fiberglass Coatings Inc.  
 4301A 34th Street North  
 St. Petersburg, FL 33714  
**Emergency Phone:** ChemTel(800)255-3924  
**Customer Service:** 800-272-7890  
**E-Mail:** www.fgci.com

### 2. HAZARDS IDENTIFICATION

#### GHS CLASSIFICATIONS

##### Health:

Acute Toxicity (Dermal), Category 4  
 Skin Irritation, Category 2  
 Eye Irritation, Category 2  
 Skin Sensitization, Category 1  
 Acute Toxicity (Inhalation), Category 5

##### Environmental:

Aquatic Toxicity (Acute), Category 2

#### GHS LABEL



Exclamation  
mark

**SIGNAL WORD:** WARNING

#### HAZARD STATEMENTS

H312: Harmful in contact with skin.  
 H333: May be harmful if inhaled.  
 H315: Causes skin irritation.  
 H319: Causes serious eye irritation.  
 H317: May cause an allergic skin reaction.  
 H401: Toxic to aquatic life.

#### PRECAUTIONARY STATEMENT(S)

**Prevention:**

P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P261: Avoid breathing dust/fume/gas/mist/vapors/spray.  
 P264: Wash thoroughly after handling.  
 P273: Avoid release to the environment.

**Response:**

P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337+P313: If eye irritation persists: Get medical advice/attention.  
 P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.  
 P362: Take off contaminated clothing and wash before reuse.

**Disposal:**

P501: Dispose of contents/container in accordance with all Federal, State, and local regulations.

**EMERGENCY OVERVIEW**

**PHYSICAL APPEARANCE:** Amber to Red colored syrup

**IMMEDIATE CONCERNS:** Material will be irritating to both the eyes and skin, fumes may cause headache and nausea.

**POTENTIAL HEALTH EFFECTS**

**EYES:** Severe eye irritation.

**SKIN:** Causes skin irritation.

**INHALATION:** May cause nose, throat, and lung irritation. Inhalation of vapors and or aerosols in high concentrations may cause irritation of the respiratory system.

**CARCINOGENICITY:** This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.

**MEDICAL CONDITIONS AGGRAVATED:** Liver disorders (such as jaundice or liver enlargement). Kidney disorders (such as edema, or proteinuria). Asthma. Adverse respiratory effects (such as cough, tightness of chest or shortness of breath). Skin disorders and Allergies. Adverse skin effects (such as rash, irritation or corrosion). Adverse eye effects (such as conjunctivitis or corneal damage). Eye disease

**ROUTES OF ENTRY:** Skin, Inhalation, Eyes

**TARGET ORGAN STATEMENT:** Respiratory system. Skin. Eyes. Kidney. Liver. Pancreas. Spleen.

**IRRITANCY:** Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

**SENSITIZATION:** Repeated or prolonged contact causes sensitization, asthma and eczemas.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

| Chemical Name                                     | Wt.% | CAS        |
|---------------------------------------------------|------|------------|
| TETA reaction products with Phenol / Formaldehyde | > 55 | 32610-77-8 |
| Triethylenetetramine                              | < 20 | 112-24-3   |
| Phenol                                            | 17   | 108-95-2   |

**COMMENTS:** The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses. If irritation persists seek immediate medical attention.

**SKIN:** Wash off immediately with plenty of water for at least 20 minutes. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately.

**INGESTION:** Aspiration hazard. If swallowed, Do NOT induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Rinse mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

**INHALATION:** If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

**ADDITIONAL INFORMATION:** Application of corticosteroid cream has been effective in treating skin irritation.

#### 5. FIRE FIGHTING MEASURES

**FLAMMABLE CLASS:** Not categorized as Flammable by GHS standards.

**GENERAL HAZARD:** Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.

**EXTINGUISHING MEDIA:** Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Dry sand. Limestone powder.

**HAZARDOUS COMBUSTION PRODUCTS:** May form Ammonia gas, oxides of Carbon and Nitrogen, Noxious and Toxic fumes.

**FIRE FIGHTING PROCEDURES:** Evacuate any non-essential personnel. Extinguish all ignition sources if safe to do so. Use water to cool exposed containers and structures until fire is out. Avoid spreading burning material with water used for cooling purposes.

**FIRE FIGHTING EQUIPMENT:** Full Bunker gear(helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus (SCBA).

#### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

**LARGE SPILL:** Follow procedure for small spills. Dike ahead of spill to contain material. Water mist may be used to disperse vapors. Notify proper authorities if the spill cannot be contained. Follow Federal, State, and local regulations for disposal.

##### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Construct a dike to prevent spreading.

**GENERAL PROCEDURES:** Always ensure proper ventilation from any spill. Respirators or SCBA are required if permissible exposure limits are exceeded due to inadequate general ventilation. All spills should be contained as best as possible. All chemical spills should be assumed to be hazardous to the environment to ensure safety.

#### 7. HANDLING AND STORAGE

**HANDLING:** Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke.

**STORAGE:** Do not store near acids. Keep away from alkalis. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Keep containers tightly closed in a dry, cool and well-ventilated place.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE GUIDELINES**

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) |     |                 |                   |           |                   |
|---------------------------------------------|-----|-----------------|-------------------|-----------|-------------------|
|                                             |     | EXPOSURE LIMITS |                   |           |                   |
|                                             |     | OSHA PEL        |                   | ACGIH TLV |                   |
| Chemical Name                               |     | ppm             | mg/m <sup>3</sup> | ppm       | mg/m <sup>3</sup> |
| Triethylenetetramine                        | TWA | 1               | 6                 |           |                   |
| Phenol                                      | TWA | 5               | 19                | 5         | 19                |

**ENGINEERING CONTROLS:** Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (PEL/TLV). Any installed emergency eye wash station or safety showers should be located near the work area.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** Chemical splash goggles and/or face shield. Always use proper eye protection around the work area.

**SKIN:** Butyl-rubber, Nitrile rubber. Neoprene gloves. Impervious gloves. PVC disposable gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

**RESPIRATORY:** Vapor respirator may be required if exposure limits are exceeded. Use a NIOSH approved respirator or equivalent when required. Proper mechanical ventilation should be installed to ensure the exposure levels are below the allowable thresholds (PEL/TLV).

**PROTECTIVE CLOTHING:** Long sleeve shirts and trousers without cuffs. Impervious clothing.

**WORK HYGIENIC PRACTICES:** Never eat or drink in areas where the chemical is being used. Wash hands after handling to limit exposure.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL STATE:** Liquid

**ODOR:** Phenolic odor.

**ODOR THRESHOLD:** No data available.

**APPEARANCE:** Amber Viscous Liquid

**COLOR:** Amber

**pH:** 10

**PERCENT VOLATILE:** N/A = Not Applicable

**FLASH POINT AND METHOD:** 135.56°C (276°F) Closed Cup

**FLAMMABLE LIMITS:** No data available.

**AUTOIGNITION TEMPERATURE:** No data available.

**VAPOR PRESSURE:** < 1 mm Hg @ 20 C

**VAPOR DENSITY:** No data available.

**BOILING POINT:** > 230°C (446°F)

**FREEZING POINT:** No data available.

**MELTING POINT:** No data available.

**SOLUBILITY IN WATER:** 0.25 g/L

**EVAPORATION RATE:** No data available.

**DENSITY:** 67.422 lbs/ft<sup>3</sup> at 21 °C (70°F) 1.08 g/cm<sup>3</sup>

**SPECIFIC GRAVITY:** 1.08 (Water = 1)

**VISCOSITY:** No data available.

**(VOC):** No data available.

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**STABILITY:** This product is stable under normal conditions of storage and use.

**CONDITIONS TO AVOID:** Avoid all unplanned contact with strong reactive chemicals including Acids, Bases, Oxidizers and Amines

**HAZARDOUS DECOMPOSITION PRODUCTS:** Nitric acid. Ammonia Nitrogen oxides (NO<sub>x</sub>). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide(CO<sub>2</sub>). Aldehydes Flammable hydrocarbon fragments. Organic acid vapors. Nitrosamine.

**INCOMPATIBLE MATERIALS:** Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds. CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Nitrous acid and other nitrosating agents. Oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

| Chemical Name        | ORAL LD <sub>50</sub><br>(rat) | DERMAL LD <sub>50</sub><br>(rabbit) | INHALATION<br>LC <sub>50</sub> (rat) |
|----------------------|--------------------------------|-------------------------------------|--------------------------------------|
| Triethylenetetramine | 2500 mg / kg<br>(Rat)          | 550 mg/kg<br>(Rabbit)               |                                      |
| Phenol               | 410 to 650 mg /<br>kg          | 630 mg / kg                         | 900 mg/L (8h)                        |

**NOTES:** No data is available on the product itself.

**EYE EFFECTS:** Eye irritant

**SKIN EFFECTS:** Skin Irritant, Sensitizer.

**CHRONIC:** Results from a battery of short term genotoxicity tests on this material or its components indicate mutagenic activity. Absorption of phenolic solutions through the skin may be very rapid and can cause damage to the kidneys, liver, pancreas and spleen, and edema of the lungs.

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** Do NOT discharge into sewers or waterways.

**BIOACCUMULATION/ACCUMULATION:** Low bioaccumulation potential.

**AQUATIC TOXICITY (ACUTE):** Values for Phenol (CAS# 108-95-2)

**48-HOUR EC<sub>50</sub>:** 4-7 mg/L (Daphnia magna)

**Notes:** No data is available on the product itself.

**13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** Disposal should be in accordance with all Federal, State, and local regulations. Empty containers may still be considered dangerous due to residual vapors/liquid/dust.

**14. TRANSPORT INFORMATION****DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not Regulated by DOT

**PRIMARY HAZARD CLASS/DIVISION:** Not Listed.

**ROAD AND RAIL (ADR/RID)**

**PROPER SHIPPING NAME:** Not Dangerous Goods

**AIR (ICAO/IATA)**

**SHIPPING NAME:** Not Dangerous Goods

**VESSEL (IMO/IMDG)**

**SHIPPING NAME:** Not Dangerous Goods

**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:** Immediate (acute) Health Hazard, Chronic (Delayed) Health Hazard.

**FIRE:** No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

**313 REPORTABLE INGREDIENTS:** Phenol

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

**CERCLA REGULATORY:** Not Listed.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

**TSCA REGULATORY:** All items are TSCA listed

**CALIFORNIA PROPOSITION 65:** This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

**OSHA HAZARD COMM. RULE:** Irritant. Sensitizer.

**CANADA**

**WHMIS CLASS:** Class D-2A: Very toxic material causing other toxic effects  
Class D-2B: Toxic material causing other toxic effects

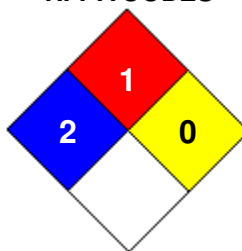
**DOMESTIC SUBSTANCE LIST (INVENTORY):** All components are listed.

**16. OTHER INFORMATION**

**PREPARED BY:** BC

**HMIS RATING**

|                            |                          |          |
|----------------------------|--------------------------|----------|
| <b>HEALTH</b>              | <input type="checkbox"/> | <b>2</b> |
| <b>FLAMMABILITY</b>        | <input type="checkbox"/> | <b>1</b> |
| <b>PHYSICAL HAZARD</b>     | <input type="checkbox"/> | <b>0</b> |
| <b>PERSONAL PROTECTION</b> | <input type="checkbox"/> |          |

**NFPA CODES**

**HMIS RATINGS NOTES:** The customer is responsible for determining the PPE code for this material.

**MANUFACTURER DISCLAIMER:** This information is compiled from sources believed reliable as of the date of issue, it is provided in good faith and correct to the best of our knowledge. No warranty, guarantee, or representation is made as to the sufficiency of the information for the safe use of the product nor to relieve the end user of their own Federal, State, and Local regulatory compliance requirements.