

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)

1. PRODUCT IDENTIFICATION

Trade Name(s): Geo-Seal EFC – Part B

Synonyms: N/A

CAS No: N/A

Supplier:

EPRO Services, Inc.

PO Box 347

Derby, KS 67037

800-882-1896 (8:00am – 5:00pm CST)

2. HAZARD(S) IDENTIFICATION

Classification:

Specific Target Organ Toxicity - Repeated Exposure: Category 2

Skin Irritation: Category 2

Serious Eye Damage: Category 1

Respiratory Sensitizer (Solid/Liquid): Category 1

Skin Sensitizer: Category 1B

Carcinogenicity - Category 2

Reproductive Toxicity: Category 2

Acute aquatic toxicity: Category 3

Corrosive to metals: Category 1

Acute toxicity, Dermal: Category 5

Acute toxicity, Inhalation: Category 4

Acute toxicity, Oral: Category 4

Pictograms:



Signal Word: Danger

Hazardous Statements - Physical: May be corrosive to metals.

Hazardous Statements - Health: May cause damage to organs through prolonged or repeated exposure. Causes skin irritation. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Suspected of causing cancer. Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard). Harmful if swallowed. May be harmful in contact with skin. Harmful if inhaled.

Hazardous Statements - Environmental: Harmful to aquatic life.

Precautionary Statements - General: If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.

Precautionary Statements - Prevention: Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. In case of inadequate ventilation, wear respiratory protection.

Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid release to the environment. Keep only in original packaging. Do not eat, drink, or smoke when using this product. Use only outdoors or in a well-ventilated area.

Precautionary Statements - Response: Get Medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of water. Specific treatment (see section 4 on this SDS). If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Precautionary Statements - Storage: Store locked up. Store in a corrosive resistant/? container with a resistant inner liner.

Precautionary Statements - Disposal: Dispose of contents/ container to an approved waste disposal plant.

Precautionary Statements - Other: Absorb spillage to prevent material damage.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0135108-88-2	FORMALDEHYDE, POLYMER WITH BENZENAMINE, HYDROGENATED	18% - 32%
0014808-60-7	QUARTZ	13% - 24%
0000100-51-6	BENZYL ALCOHOL	13% - 24%
0013463-67-7	TITANIUM DIOXIDE	8% - 14%
0001333-86-4	CARBON BLACK	3% - 6%
0000111-40-0	DIETHYLENE TRIAMINE	1.0% - 1.7%
0001761-71-3	METHYLENEDI(CYCLOHEXYLAMINE)	0.8% - 1.3%
0000080-05-7	BISPHENOL A	0.6% - 1.1%

4. FIRST-AID MEASURES

Inhalation: Remove source of exposure or move person to fresh air and keep comfortable for breathing. If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

Skin Contact: Rinse/wash with lukewarm, gently flowing water and mild soap for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention. If exposed or concerned: Get medical advice/attention.

Eye Contact: Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position. Give 3 or 4 glasses of water to drink. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical, foam, carbon dioxide water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media: If water is used, use very large quantities of cold water.

Specific Hazards in Case of Fire: Excessive pressure or temperature may cause explosive rupture of containers.

Fire-fighting Procedures: Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions: Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear. Care should always be exercised in dust/mist areas.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedure: ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not touch or walk-through spilled material. Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the public or the environment occurs or is likely to occur. If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment: Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions: Avoid breathing vapors. Avoid contact with skin, eyes, or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions: Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up: Soak up material with absorbent and shovel into a chemical waste container. Cover container, but do not seal, and remove from work area. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, call EPRO Services, Inc. at 800-882-1896.

7. HANDLING AND STORAGE

General: Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking, and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored. Individuals with existing respiratory disease such as chronic bronchitis, emphysema, or asthma should not be exposed.

Ventilation Requirements: Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements: Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet

OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool dry area. Store liquid in containers above ground and surround by dikes to contain spills or leaks. Do not cut, drill, grind, weld, or perform similar operations on or near containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection: Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene, or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g., frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended under the following conditions: emergency situations, when product vapor concentration is greater than 20 ppm for a period longer than 15 min., during repair and cleaning of equipment, during transfer or discharge of the product.

Appropriate Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m ³)	OSHA STEL (ppm)	OSHA STEL (mg/m ³)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m ³)	NIOSH STEL (ppm)	NIOSH STEL (mg/m ³)	NIOSH Carcinogen
CARBON BLACK		3.5			1				3.5a			1
DIETHYLENE TRIAMINE								1	4			
QUARTZ	a	[10 mg/m ³ percent SiO ₂ +2 / 250 percent SiO ₂ +5 mppcf]; [30 mg/m ³ percent SiO ₂ +2];			[1,3]; [3];				0.05e			1
TITANIUM DIOXIDE		15			1			b				1

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m ³)	ACGIH STEL (ppm)	ACGIH STEL (mg/m ³)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations
CARBON BLACK		3 (I)			A3	Bronchitis	A3
DIETHYLENE TRIAMINE	1	4.2				URT & eye irr	Skin
QUARTZ		0.025 (R)			A2	Pulmonary fibrosis; lung cancer	A2
TITANIUM DIOXIDE		10			A4	LRT irr	A4

9. PHYSICAL AND CHEMICAL PROPERTIES

Density: 10.88 lb/gal	Specific Gravity: 1.30
VOC Regulatory: 0.00 lb/gal	VOC Part A & B Combined: N.A.
Appearance: N.A.	Odor Threshold: N.A.
Odor Description: N.A.	pH: Alkaline
Water Solubility : N.A.	Flammability: N.A.
Flash Point Symbol: N.A.	Flash Point: 103 °C
Viscosity: N.A.	Lower Explosion Level: N.A.
Upper Explosion Level: N.A.	Vapor Pressure: N.A.
Vapor Density: Heavier than air	Freezing Point: N.A.
Melting Point: N.A.	Low Boiling Point: 100 °C
High Boiling Point: N.A.	Auto Ignition Temp: N.A.
Decomposition Pt: N.A.	Evaporation Rate: Slower than ether
Coefficient Water/Oil: N.A.	

10. STABILITY AND REACTIVITY

Stability: Material is stable at standard temperature and pressure.

Conditions to Avoid: Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause buildup of pressure.

Hazardous Reactions/Polymerization: Will not occur.

Incompatible Materials: This product will react with epoxies, isocyanates, and strong oxidizing agents. Some reactions can be violent.

Hazardous Decomposition Products: Combustion products: organic vapors and thermal decomposition fragments.

11. TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation: Causes skin irritation

Serious Eye Damage/Irritation: Any contact should not be left untreated. Causes serious eye damage.

Respiratory/Skin Sensitization: Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12-24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Carcinogenicity: Suspected of causing cancer.

Germ Cell Mutagenicity: No data available

Reproductive Toxicity: Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Specific Target Organ Toxicity - Single Exposure: No data available

Specific Target Organ Toxicity - Repeated Exposure: Repeated exposure generally aggravates the following medical conditions: cardiovascular disease and Chronic respiratory disease. May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: No data available

Acute Toxicity: If ingested: In humans, irritation or chemical burns of the mouth, pharynx, esophagus, and stomach can develop following ingestion, and injury may be severe and cause death.

0001333-86-4 CARBON BLACK

LC50 (rat): 6750 mg/m³ (4-hour exposure); cited as 27000 mg/m³ (27 mg/L) (1-hour exposure) (3)

0000111-40-0 DIETHYLENE TRIAMINE

LD50 (oral, rat): 1080 mg/kg body weight (1)

LD50 (oral, rat): 1800 mg/kg body weight (2)

LD50 (oral, rat): 2330 mg/kg body weight (3)

LD50 (dermal, rabbit): 1046 mg/kg (1090 mL/kg) (3)

LD50 (dermal, guinea pig): 163 mg/kg (170 mL/kg) (4-day appl

Chronic Exposure

0001333-86-4 CARBON BLACK

CARCINOGENIC EFFECTS: In 1996, the IARC reevaluated Carbon Black as a Group 2B carcinogen. This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. Prolonged inhalation of Carbon black can result in lung disease. Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

0014808-60-7 QUARTZ

Prolonged inhalation of respirable crystalline silica dust can result in lung disease (i.e., silicosis and/or lung cancer). Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

Potential Health Effects - Miscellaneous

0001333-86-4 CARBON BLACK

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease. WARNING: This chemical is known to the State of California to cause cancer.

0013463-67-7 TITANIUM DIOXIDE

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rats' lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.?

0014808-60-7 QUARTZ

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause breathing difficulties, lung injury. WARNING: This chemical is known to the State of California to cause cancer.

12. ECOLOGICAL INFORMATION (non-mandatory)

Toxicity: Harmful to aquatic life

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

Bio-accumulative Potential

0001333-86-4 CARBON BLACK

A relevant bioaccumulation potential of carbon black is not expected based on its insolubility in organic solvents and in water. Furthermore, since the aggregate diameter of carbon black varies between 80 nm and 810 nm, bioaccumulation of particulate carbonblack is not likely owing to the large diameter of the solid aggregate particles.

Persistence and Degradability

0001333-86-4 CARBON BLACK

Carbon Black's insolubility in water results in it not being biodegradable in any medium or by biota. It is considered persistent in the natural environment.

13. DISPOSAL CONSIDERATIONS (non-mandatory)

Waste Disposal: Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

14. TRANSPORT INFORMATION (non-mandatory)**U.S. DOT Information:**

Shipping Name: Corrosive Liquid, N.O.S. (contains Amine)

UN/NA #: 1760

Hazard Class: 8 Packing Group: III

Placard: CORROSIVE

IMDG Information:

Commodity Name: Corrosive liquids, n.o.s. (Contains Amine)

UN/NA #: 1760

Hazard Class: 8 Packing Group: III

Marine Pollutant: No data available

IATA Information:

Commodity Name: Corrosive liquids, n.o.s. (Contains Amine)

UN/NA #: 1760

Hazard Class: 8 Packing Group: III

15. REGULATORY INFORMATION (non-mandatory)

CAS	Chemical Name	% By Weight	Regulation List
0135108-88-2	FORMALDEHYDE, POLYMER WITH BENZENAMINE, HYDROGENATED	18% - 32%	DSL,SARA312,TSCA
0014808-60-7	QUARTZ	13% - 24%	DSL,SARA312,TSCA,California Proposition 65
0000100-51-6	BENZYL ALCOHOL	13% - 24%	DSL,SARA312,VOC,TSCA
0013463-67-7	TITANIUM DIOXIDE	8% - 14%	DSL,SARA312,TSCA,California Proposition 65
0001333-86-4	CARBON BLACK	3% - 6%	DSL,SARA312,TSCA,California Proposition 65
0000111-40-0	DIETHYLENE TRIAMINE	1.0% - 1.7%	DSL,SARA312,VOC,TSCA
0001761-71-3	METHYLENEDI (CYCLOHEXYLAMINE)	0.8% - 1.3%	DSL,SARA312,VOC,TSCA
0000080-05-7	BISPHENOL A	0.6% - 1.1%	DSL,SARA312,SARA313,TSCA,California Proposition 65

16. OTHER INFORMATION

OTHER INFORMATION:

Note: As per GHS, category 1 is the greatest level of hazard within each class.

GLOSSARY:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration.

EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA - Time Weighted Value; US DOT- US Department of Transportation; WHMIS - Workplace Hazardous Materials Information System.

This information provided on this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designated only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.