

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

Product Name: FOAMGLAS[®] insulation, FOAMGLAS[®] One™ insulation, FOAMGLAS[®] HLB insulation

Manufacturer/Supplier:

Pittsburgh Corning Corporation

800 Presque Isle Drive

Pittsburgh, PA 15239

Information Number: 724-327-6100

CHEMTREC: 800/424-9300

Generic Name: cellular glass insulation

Use: Insulation of tanks, spheres, piping, roofs and equipment

General Comments: General information and emergency information available 8:00 AM – 5:00 PM
Monday through Friday.

CHEMTREC telephone number is to be used only in the event of chemical transportation emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to technical service.

SECTION 2 – HAZARD(S) IDENTIFICATION

HYDROGEN SULFIDE

(EFFECTS OF OVEREXPOSURE TO HYDROGEN SULFIDE GAS WHEN CELLS ARE BROKEN
WITHOUT ADEQUATE VENTILATION)

ROUTES OF EXPOSURE: Inhalation, Eyes.

IMMEDIATE EFFECTS:

Inhalation - headache, nausea, and difficult breathing, dizziness. The sense of smell may be fatigued over time. The odor and irritating effects do not offer dependable warning to workers who may be exposed to gradually increasing amounts and therefore become used to it.

Eyes - irritation and inflammation of the mucous membrane, tearing, sensitivity to light

CHRONIC:

Inhalation – Chronic poisoning results in headache, inflammation of the eyelids and the mucous membrane that lines the inner surface of the eyelids, digestive disturbances, weight loss and general weakness.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE TO HYDROGEN SULFIDE: Preexisting upper respiratory and lung diseases such as, but not limited to bronchitis, emphysema and asthma, pulmonary heart disease or eye problems.

SAFETY DATA SHEET**GLASS PARTICLES**
EFFECTS OF EXPOSURE TO GLASS PARTICLES

ROUTES OF EXPOSURE: Inhalation, Eyes, Skin, Ingestion.

IMMEDIATE EFFECTS:

Inhalation - dryness and irritation of the mucous membranes and respiratory tract.
 Eyes - irritation and inflammation of the mucous membrane, tearing, sensitivity to light
 Skin - irritation or abrasion from glass particles.
 Ingestion - possible abrasion of mouth and throat from glass particles.

CHRONIC:

Inhalation – Prolonged or repeated overexposure to airborne glass dust can lead to inflammation and scarring of lung tissue.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE TO GLASS PARTICLES: None known

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient | App. % by Vol. | CAS # |
|-------------------|-----------------------|--------------|
| Hydrogen Sulfide | < 0.1 | 7783-06-4 |
| Carbon Monoxide | 1 - 6 | 630-08-0 |
| Carbon Dioxide | 85 - 95 | 124-38-9 |
| Glass Dust | Varies | NA |

SECTION 4 – FIRST AID MEASURES

GENERAL ADVICE:

INHALATION: Move the exposed person to fresh air at once, apply artificial respiration if needed. Call poison center, physician or emergency medical service giving CAS names and numbers of gases. Encourage victim to cough, spit out, and blow nose to remove dust. If breathing is difficult, GET MEDICAL ATTENTION.

SKIN CONTACT: Wash thoroughly without pressure. If irritation persists or skin is broken, consult physician.

EYE CONTACT: Flush with potable water for 15 minutes, do not rub or apply pressure. Consult physician or emergency medical service

INGESTION: Do not induce vomiting. Consult physician, emergency medical service or poison center.

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SECTION 5 – FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: water, dry chemical or carbon dioxide

EXPLOSION DATA:

SENSITIVITY TO MECHANICAL IMPACT: NA
SENSITIVITY TO STATIC DISCHARGE: NA

SPECIAL FIRE FIGHTING PROCEDURES: May release hydrogen sulfide and carbon monoxide gas when involved in a fire. The small amounts of hydrogen sulfide and carbon monoxide released are not expected to contribute to the intensity of a fire. Wear self contained breathing apparatus and protective clothing.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PRECAUTIONS FOR PERSONNEL: Wear proper protective clothing and equipment.

ENVIRONMENTAL PRECAUTIONS: Ensure adequate ventilation. Use dustless methods. All in accordance with local, state and federal government regulations.

PROCESS FOR CLEANING: Collect in sift proof containers. Avoid generation of dust.

SECTION 7 – HANDLING AND STORAGE

EXPOSURE GUIDELINES: Engineering Controls: When cutting, grinding, crushing, or drilling FOAMGLAS® insulation, provide general or local ventilation systems, as needed, to maintain airborne dust concentrations below the regulatory limits. Local vacuum collection is preferred since it prevents release of contaminants into the work area by controlling it at the source. Other technologies that may aid in controlling airborne respirable dust include wet suppression, ventilation, process enclosure, and enclosed employee work stations. When exposed to dust above recommended limits, wear a suitable NIOSH-approved respirator with a protection factor appropriate for the level of exposure. Seek guidance from a qualified industrial hygienist or safety professional, prior to respirator selection and use.

HANDLING: Avoid generation of dust. Wash hands before eating, drinking, smoking or using toilet.

STORAGE: If storing for long periods, protect product from weather

KEEP AWAY FROM CHILDREN

RESPIRATORY PROTECTION: Use nuisance dust mask when cutting or abrading with adequate ventilation. Seek guidance from a qualified industrial hygienist or safety professional, prior to dust mask/respirator selection and use. (Supplied air or self-contained breathing apparatus in poorly ventilated areas is required when cutting or crushing of FOAMGLAS® insulation causes PEL of hydrogen sulfide and carbon monoxide gases to be exceeded.

VENTILATION: Use local exhaust when cutting. Use mechanical ventilation when crushing large volumes.

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- PROTECTIVE GLOVES:** Gloves - rubber impregnated canvas - for abrasion protection.
- EYE PROTECTION:** When cutting, grinding, crushing, or drilling FOAMGLAS® insulation, wear safety glasses with side shields or dust goggles in dusty environments. Goggles for dust protection while cutting or abrading in wind or overhead work.
- OTHER PROTECTIVE MEASURES:** Normal work clothes including long sleeved shirt is recommended.
- SPECIAL PRECAUTIONS:** Respirable dust particles may be generated by crushing, cutting, grinding or drilling FOAMGLAS® insulation. Follow protective controls listed in the Exposure Guidelines above when handling these products.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

| Ingredient | App. % by Vol. | EXPOSURE LIMITS | | | CAS # |
|------------------|----------------|----------------------|---------------|--|-----------|
| | | TLV* | NIOSH REL TWA | PEL** | |
| Hydrogen Sulfide | <0.1 | 1 ppm | UN | 10 ppm TWA | 7783-06-4 |
| Carbon Monoxide | 1 - 6 | 25 ppm | UN | 50 ppm TWA | 630-08-0 |
| Carbon Dioxide | 85 - 95 | 5000 ppm | UN | 5000 ppm TWA | 124-38-9 |
| Glass Dust | Varies | 10 mg/m ³ | UN | 15 mg/m ³ 5 mg/m ^{3a} (^a respirable) | NA |

ADDITIONAL ADVICE: NA

* American Conference of Governmental Industrial Hygienists.

** OSHA 29 CFR 1917.24

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|--------------------------|--|--|-------------|
| Freezing Point: °C (°F) | NA | Flash Point : °C (°F) TCC | NA |
| Boiling Point: °C (°F) | NA | Ignition Temperature: °C (°F) | NA |
| Vapor Pressure (MM Hg): | NA | Flammable Limits: LEL | NA |
| | | UEL | NA |
| Melting Point: : °C (°F) | 732 (1350) | Specific Gravity (H ₂ O = 1): | 0.11 – 0.22 |
| Vapor Density (Air = 1) | NA | Percent Volatile By Volume (%) | NA |
| Solubility in Water: | Insoluble | pH: | NA |
| Appearance and Odor: | Black cellular material, no odor unless cut or crushed | Evaporation Rate (BuAC=1) | NA |
| Odor Threshold: | 0.002 ppm | Coefficient of Water/Oil Distribution: | NA |

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SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: NA

MATERIALS TO AVOID: NA

HAZARDOUS POLYMERIZATION: Will Not Occur.

HAZARDOUS DECOMPOSITION PRODUCTS: None

SECTION 11 – TOXICOLOGICAL INFORMATION

| CAS # | INGREDIENT | DERMAL LD50 | INHALATION LD50 | ORAL LD50 |
|-----------|------------------|-------------|------------------------------|-----------|
| 7783-06-4 | Hydrogen Sulfide | NE | 444 ppm-rat 634 ppm-mus | NE |
| 630-08-0 | Carbon Monoxide | NE | 1807 ppm-rat 2444 ppm-mus | NE |
| 124-38-9 | Carbon Dioxide | NE | NE | NE |
| NA | Glass Dust | NE | NE | NE |

| CAS # | INGREDIENT | CARCINOGENICITY | | TERATOGENICITY | MUTAGENICITY |
|-----------|------------------|-----------------|------|----------------|--------------|
| | | ACGIH | IARC | | |
| 7783-06-4 | Hydrogen Sulfide | NE | NE | NE | NE |
| 630-08-0 | Carbon Monoxide | NE | NE | NE | NE |
| 124-38-9 | Carbon Dioxide | NE | NE | NE | NE |
| NA | Glass Dust | NE | NE | NE | NE |

Note:

SECTION 12 – ECOLOGICAL INFORMATION

VOLATILE ORGANIC COMPOUNDS: 0 Grams per Liter (g/l). 0 Pounds per Gallon (lb/g).

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be made in accordance with Federal, State and Local regulations.

SECTION 14 – TRANSPORT INFORMATION

SHIPPING CLASS: Not Regulated

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SECTION 15 – REGULATORY INFORMATION

SARA SECTION 302:

SARA (311,312) HAZARD CLASS:

SARA (313) CHEMICALS: NONE

CERCLA: NA

CPSC CLASSIFICATION:

HMIS: FLAMMABILITY: 0 REACTIVITY: 0 HEALTH: 0

NFPA: FLAMMABILITY: 0 REACTIVITY: 0 HEALTH: 0

WHMIS CLASSIFICATION: D 2B

CALIFORNIA PROPOSITION 65:

- A. This product contains a chemical known to the State of CA to cause birth defects or other reproductive harm.
- B. This product contains a chemical known to the State of CA to cause cancer.
- C. This product contains a chemical known to the State of CA to cause cancer and birth defects or other reproductive harm.

SECTION 16 – OTHER INFORMATION

NA = not applicable

NE = not established

UN = unavailable

CL = Ceiling Limit

NEGL = Negligible

PROP. = Proprietary

“THE DATA INCLUDED HEREIN ARE PRESENTED IN ACCORDANCE WITH THE VARIOUS ENVIRONMENT, HEALTH AND SAFETY REGULATIONS. IT IS THE RESPONSIBILITY OF A RECIPIENT OF THIS DATA TO REMAIN CURRENTLY INFORMED ON CHEMICAL HAZARD INFORMATION, TO DESIGN AND UPDATE ITS INFORMED ON CHEMICAL HAZARD INFORMATION, TO DESIGN AND UPDATE ITS OWN PROGRAM AND TO COMPLY WITH ALL NATIONAL, FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS APPLICABLE TO SAFETY, OCCUPATIONAL HEALTH, RIGHT-TO-KNOW AND ENVIRONMENTAL PROTECTION.”

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