SECTION 1 – CHEMICAL PRODUCT AND COMPANY 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 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	App. % by Vol.	CAS #
Hydrogen Sulfide	< 1.2	7783-06-4
Carbon Monoxide	0 - 4	630-08-0
Carbon Dioxide	85 - 95	124-38-9
Glass Dust	Varies	NA

SECTION 3 – HAZARDOUS 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 maybe exposed to gradually increasing amounts and therefore become used to it.
- Eyes irritation and inflammation of the mucous membrane, tearing, sensitivity to light
- <u>CHRONIC:</u>
- 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.

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

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 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.

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.

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 RESTRICTIONS AND PERSONAL PROTECTION

		EX			
Ingredient	App. % by Vol.	TLV*	NIOSH REL TWA	PEL**	CAS #
Hydrogen Sulfide	< 1.2	10 ppm	UN	10 ppm TWA	7783-06-4
Carbon Monoxide	0 - 4	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: PEL for hydrogen sulfide may be reached if 1 cubic ft of material is crushed in a closed space of 3000 cubic ft. See Section 7.

- * American Conference of Governmental Industrial Hygienists.
- ** OSHA 29 CFR 1917.24

SECTION 9 – PHYSICAL 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	ΝΔ	Flammable Limits: LEL	NA	
Hg):	NA	UEL	NA	
Melting Point: : °C (°F)	732 (1350)	Specific Gravity $(H_2 0 = 1)$:	0.11 – 0.22	
Vapor Dopoity (Air -1)	ΝΔ	Percent Volatile By Volume	ΝΔ	
vapor Density (All = 1)	NA	(%)	IN/A	
Solubility in Water:	Insoluble	pH:	NA	
Appearance and Odor:	Black cellular material, no	Evaporation Rate (BuAC=1)	NA	
, appearance and eden	odor unless cut or crushed			
Odor Throshold:	0.002 ppm	Coefficient of Water/Oil	ΝΔ	
		Distribution:		

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	INHALATON 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	CARCINOG ACGIH	ENICITY IARC	TERATOGENICITY	MUTAGENICITY
7783-06-4	Hydrogen Sulfide	NE	NE	NE	NE
630-08-0	Carbon Monoxide	NE	NE	NE	NE
124-38-9 NA	Carbon Dioxide Glass Dust	NE NE	NE NE	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

SECTION 15 – REGULATORY INFORMATION

SARA S SARA (3 SARA (3 CERCL/ CPSC C	ECTION 302: 811,312) HAZARD CLASS: 813) CHEMICALS: A: ELASSIFICATION:		NONE NA			
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 NEGL = Negligible NE = not established PROP. = Proprietary UN = unavailable

CL = Ceiling Limit

"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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