

Safety Data Sheet

Material Name: **Protherm Cellular Glass**

Section 1 – Identification

Product Name: Protherm Cellular Glass

Chemical Name: Cellular Glass

Product Use: Thermal Insulation

Manufacturer / Supplier Information:

Manufactured for:

Amity Insulation Group Inc.
14715 122 Avenue,
Edmonton, AB T5L 2W4
Phone: 780-454-8558

Emergency Contacts: CHEMTREC: 1-800-424-9300,
CANUTEC (Canada): 1-613-996-6666

Prepared by: David Landro, phone: 780-454-8558

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Section 2 – Hazard Identification

HAZARD CLASSIFICATION: Potential Irritant

SIGNAL WORD: **WARNING: GHS07**



HAZARD STATEMENT: Dust and odor can cause irritation. See specifics below.

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

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

- *Acute: Skin & Eye Irritation – Category 2*
 - Pre-existing skin and eye disorders may be aggravated by contact with this product.
- *Chronic: Respiratory Sensitizer – Category 1*
 - Chronic respiratory diseases such as, but not limited to bronchitis, emphysema and asthma, pulmonary heart disease may be aggravated by prolonged exposure to this material.
- *Carcinogenicity: N/A.*
 - There are no components in this product that are listed as a carcinogen by NTP, IARC, ACGIH or OSHA.

Inhalation:

- The odor and irritation effects do not offer dependable warning to workers who may be exposed to gradually increasing amounts and therefore become used to it. Dryness and irritation of the mucous membranes and respiratory tract could result. Remove affected individuals to fresh air. Effects of overexposure to Hydrogen Sulfide gas when cells are broken without adequate ventilation. Longer exposure could result in headache, inflammation of the eyelids and the

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mucous membrane that line the inner surface of the eyelids, digestive disturbances, weight loss and general weakness. Inhalation of dust created when cutting, grinding, and crushing or other activities with this product may cause temporary upper respiratory irritation and/or congestion. Result: headache, nausea, difficult breathing, scratchy throat, coughing and dizziness. Prolonged or repeated overexposure to airborne glass dust can lead to inflammation and scarring of lung tissue.

Skin Contact:

- Dust from this product may cause temporary irritation to the skin.

Eye Contact:

- Irritation and inflammation of the mucous membrane, tearing, and sensitivity to light. Temporary irritation such as itching or redness may occur.

Ingestion:

- Ingesting this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances as well as possible abrasion of mouth and throat from glass particles.

Section 3 – Composition / Information on Ingredients

CAS #	Component	Percent by Weight (ppm)
7783-06-04	Hydrogen Sulfide	<1.2
630-08-0	Carbon Monoxide	0–4
124-38-9	Carbon Dioxide	85–95
N/A	Glass Dust	Varies

Section 4 – First Aid Measures

Inhalation:

- If inhaled, remove the affected person to fresh air. Drink water to clear throat and blow nose to removed dust. Apply artificial respiration if needed. If irritation persists, or breathing is difficult, get immediate medical attention by calling the poison center, physician or emergency medical service giving CAS names and numbers of gases.

Skin Contact:

- Wash with mild soap and running water. Wash before eating or using the restroom. If irritation persists get medical attention.

Eye Contact:

- Immediately flush eyes with potable running water for at least 15 minutes. Do not rub or apply pressure. Dust particles may scratch the eye. If irritation persists get medical attention.

Ingestion:

- Not intended to be ingested or eaten. Do not induce vomiting. Drink large amounts of water to reduce irritation. If irritation persists, or breathing is difficult, get immediate medical attention by calling the poison center, physician or emergency medical service giving CAS names and numbers of gases.

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Section 5 – Fire Fighting Measures

General Fire Hazards and Fire Fighting Instructions:

- There is no potential for fire or explosion. However, the product 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.

Extinguishing Media:

- Dry chemical, foam, carbon dioxide and water fog.

Section 6 – Accidental Release Measures

Containment Procedures:

- Pick up large pieces, vacuum dusts and use water as a dust suppressant if sweeping is necessary. Do not use compressed air for clean-up, avoid dry sweeping and wear proper protective clothing.

Clean-Up Procedures:

- Collect material and place in a suitable container for disposal as non-hazardous waste. Collect in sift proof containers and avoid generation of dust.

Environmental Precautions:

- Ensure there is adequate ventilation in accordance with appropriate government authorities.

Section 7 – Handling and Storage

Handling Procedures:

- Keep product in its packaging as long as practical to minimize potential dust generation: Keep work areas clean. Avoid unnecessary handling of scrap materials. Avoid generation of dust. Wash hands before eating, drinking, smoking or using the washroom.

Storage Procedures:

- Material should be kept dry and covered. Stored material should be protected from spark producing activities. Protect product from weather.

Section 8 – Exposure Controls / Personal Protection

Exposure Procedures:

- When cutting, grinding, crushing or drilling cellular glass, it is important to provide general or local ventilation systems as required in order to maintain dust concentrations below the regulatory limits. Wet suppression, and enclosed employee work stations will also assist. When exposed to dust above recommended limits, wear a suitable NIOSH-approved respirator with a protection factor appropriate for the level of exposure.

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Exposure Limits:

Ingredient	App. % by Volume	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	N/A

Ventilation:

- General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below regulatory limits. Under conditions where the product is sawed, drilled, ground or otherwise altered, local exhaust ventilation should be used to minimize exposures.

Personal Protective (respiratory) Equipment:

- Wear a NIOSH-certified respirator when handling and installing cellular glass insulation products in accordance with NIOSH-based exposure guideline.
- All Employers should consult requirements set forth in the Respiratory Protection Standard (OSHA 29 CFR Part 1910.134) and any supplemental amendments to that Standard. When cutting or crushing cellular glass in poorly ventilated areas causing hydrogen sulfide and carbon monoxide gases to be exceeded, supplied air or self-contained breathing apparatus is required.

Skin Protection:

- Normal work clothing (long sleeved shirt, long pants and leather, cotton or knit gloves) is recommended along with rubber impregnated canvas gloves for abrasion protection.

Eye / Face Protection:

- Wear safety glasses with side shields when handling this product. Goggles and /or face shield may be required when installing product overhead, outside in wind conditions or during cutting or machining.

Section 9 – Physical & Chemical Properties

Appearance:	Black cellular material
Physical State	Solid
Vapor Density (Air =1)	Not Applicable
Vapor Pressure	Not Applicable
Specific Gravity (H ₂ O =1)	0.11 – 0.222
Odour Threshold	.002 ppm

Odour	Odourless unless cut or crushed
pH in water	Not applicable
Melting Point	1350 °F (732°C)
Freezing Point	Not Applicable
Solubility (H ₂ O =1)	Nil
Coefficient of Water/Oil Distribution	Not Applicable

Section 10 – Chemical Stability & Reactivity Information

Stability:	This is a stable material.
Reactivity:	Not reactive.
Hazardous Decomposition:	Not applicable.
Incompatible Materials:	None expected.
Hazardous Polymerization:	None expected.

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Section 11 – Toxicological Information

General Product Information:

- Dusts may cause mechanical irritation to the eyes and skin. Inhalation may cause coughing, nose and throat irritation, headaches, nausea, dizziness, shortness of breath and sneezing.

Component Analysis:

- Lethal Dose (LD50) – Lethal Concentration (LC50): No LD50-LC50's are available for this product's components.

General Carcinogenicity:

- OSHA, NTP, IARC and ACGIH have not classified this product as a carcinogen

Irritancy of the Product:

Inhalation / Skin Contact / Eye Contact:

- Dust from this product may cause mechanical irritation of the skin, eyes, nose, throat and respiratory tract. See section 3 for more information in inhalation.

Section 12 – Ecological Information

Not applicable regarding volatile organic compounds.

Section 13 – Disposal Considerations

Dispose of waste material in accordance with local, municipal, provincial and federal environmental regulations.

Section 14 – Transportation Information

Shipping Class / Name: This product is not classified nor regulated for transport.

Section 15 – Regulatory Information

Component Analysis:

- SARA (Superfund Amendments and Re-Authorization) Section 311 / 312 Hazard Class: Not applicable
- SARA Section 313 Reportable Ingredients: Not applicable
- CERCLA (Comprehensive Response Compensation and Liability Act): Not applicable
- TSCA (Toxic Substance Control Act): No information available for the product.

Canada Workplace Hazardous Materials Information System (WHMIS):

- Classification: Irritant.

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Section 16 – Other Information

TLV = Threshold Limit Value of a chemical substance is a level to which it is believed a worker can be exposed day after day for a working lifetime without adverse health effects. TLV is a reserved term of the American Conference of Governmental Industrial Hygienists (ACGIH).

NIOSH = National Institute for Occupational Safety & Health

REL = Recommended Exposure Limit

TWA = Time Weighted Average

PEL = Permissible Exposure Limits as defined by OSHA (refer www.osha.gov).

UN = Unknown

Prepared for:

Amity Insulation Group Inc.
14715 -122 Avenue
Edmonton, AB
T5L 2W4

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