

I IDENTIFICATION

Product Name: *FreeBlast*

Common Name: Crushed Glass, Glass, amorphous

CAS Number: 65997-17-3

Manufacturer: Pearl Aggregate Materials, L.L.C.

P.O. Box 6345

Diamondhead, MS 39525

1-800-255-9848 (phone)

985-863-5942 (phone)

Recommended Use: abrasive uses, abrasive blasting, fiberglass insulation, surface preparation, resurfacing, decorative uses, plus other aggregate uses.

Restrictions on Use: use Personal Protective Equipment, as you would for any other blasting abrasive media.

II HAZARD(s) IDENTIFICATION:

Glass Sand is not classified as a hazardous material by the criteria of the:

OSHA Hazard Communication Standard

Title 29, Code of Federal Regulations

Section 1910.1200 Hazard Communications

Contains no free silica

All components are amorphous/non-crystalline

Primary route(s) of entry: **Inhalation:** yes **Ingestion:** no **Skin:** no **Other:** no

Acute Health Hazards:

Eye: if *FreeBlast* has entered your eye, irritated your eye, or the surrounding area of your eye, immediately irrigate your affected eye, for at least 15 minutes.

Call a physician.

Dusts may cause minor irritation, redness, and sensitivity. Particulate matter may scratch the cornea or cause other unforeseen injury to the eye. It is important, for example, to exercise caution (to protect your eyes) when: blasting, loading/unloading, processing, and packaging. Contact lenses may be dangerous when handling this product increasing risk of discomfort and injury.

Skin: The product is not hazardous by skin contact, but removal of particles and cleansing the skin after use is advisable.

Ingestion: No specific intervention is indicated, as the product is not hazardous by ingestion. However, ingestion may cause irritation of the digestive tract; if symptoms occur consult a physician.

Trauma: Hazards may be associated with handling equipment (e.g. rail unloading, truck unloading) during a sudden release of large volumes: For example, Abrasion injuries possible during blasting operations or similar exposure.

Gross Inhalation: If gross inhalation has occurred, remove the affected individual to fresh air. Give artificial respiration and medical attention as needed.

Chronic Health Hazards

Inhalation: (Acute & Chronic): Dust in excess of recommended exposure limits may result in irritation to the respiratory tract. Chronic lung conditions may be aggravated by exposure to high concentrations of dust.

Medical Conditions Aggravated by Exposure:

Repeated inhalation of dusts over time may aggravate pre-existing respiratory disease. Precautions should be taken to alleviate the pre-existing condition.

Target Organs: Lungs, Skin, Eyes

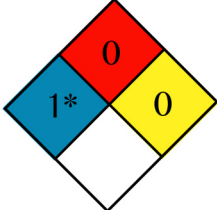
Carcinogenicity: NTP: No, **IARC Monographs:** No, **OSHA Regulated:** No,
Teratogenic: No, **Mutagenic:** No

Please note that although our product is non-hazardous, there may be potential hazards of the substrate, coatings, or contamination that are removed by the use of our product. All Material Certifications and Chemical Analyzes should be obtained before commencement of work.

Hazardous Polymerization: Will not occur.

Hazard Symbols:

Health	1*
Flammability	0
Physical Hazard	0
Personal Protection	B: Safety Glasses, Gloves

NFPA	HMIS						
	<table border="1"><tr><td>Health Hazard</td><td>1*</td></tr><tr><td>Fire Hazard</td><td>0</td></tr><tr><td>Reactivity</td><td>0</td></tr></table>	Health Hazard	1*	Fire Hazard	0	Reactivity	0
Health Hazard	1*						
Fire Hazard	0						
Reactivity	0						

*Please note that although our product is non-hazardous, although our product is inert, it can cause irritation of the skin due to abrasion, irritation of the respiratory tract due to inhalation, irritation of the eyes due to contact, and or irritation of the digestive tract due to ingestion.

HMIS Personal Protective Equipment (PPE) Rating:

Industrial Use Situations: B: Safety Glasses, Gloves

OSHA REGULATORY STATUS:

While this material is not classified as hazardous under OSHA regulations, this SDS contains valuable information critical to the safe handling and proper use of the product.

III COMPOSITION/ INFORMATION ON INGREDIENTS

Common Name: Crushed Glass Abrasive

Contents: C.A.S. #65997-17-3

Post- Consumer Cullet Composition

Material:	Amber	Emerald Green	Flint
SiO ₂	71.4-73.2%	71.5-73.1%	71.6-74.3%
R ₂ O	12.5-15.1	13.7-14.9	13.0-14.7
RO	7.6-11.3	10.3-11.0	10.2-11.6
Al ₂ O ₃	1.3-2.4	1.6-2.0	1.5-2.3
Be ₂ O ₃	0.22-0.46	0.12-0.20	0.03-0.10
TiO ₂	0.02	0.02	0.02

Generally, R₂O is either Na₂O or K₂O, while RO is from the group CaO, MgO, SrO, or BaO

Note: *FreeBlast* contains no free silica; therefore, will not cause silicosis, a fatal lung disease. Breathing dust from surfaces being blasted may cause other serious or fatal diseases. Special precautions should be taken in these cases with all material certifications and chemical analyses obtained before commencement of work.

Permissible Exposure Limits:

OSHA PEL:

Nuisance Dust: 15 mg/m³

Respirable Dust: 5 mg/m³

ACGIH (TLV): 10 mg/m³

IV FIRST AID MEASURES

Likely only in extreme conditions:

Ingestion: No Specific intervention is indicated, as the product is not hazardous by ingestion. However, ingestion may cause irritation of the digestive tract if ingestion occurs; if symptoms occur consult a physician.

Inhalation: If inhaled, immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Skin: The product is not hazardous by skin contact, but removal of particles and cleansing the skin after use is advisable. Remove contaminated clothing. Clean skin affected. Follow procedures appropriate to abrasion injuries.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, occasionally lift the upper and lower lids. Call a physician.

Trunk/Torso/Limbs: Follow procedures appropriate to abrasion or trauma.

Note to physician: No toxic substances are present in the product itself.

V FIRE-FIGHTING MEASURES

Flash Point: N/A

Lower Explosion Limit: N/A

Hazardous Decomposition Products: NONE

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: NONE

Extinguishing Media: N/A

VI ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Loading/unloading:

A release or spill will pose a housekeeping problem. Use dustless methods such as vacuum pickup or flushing with water. Do not use procedures such as dry sweeping or shoveling which produces dust.

Waste Disposal Method:

Dispose in accordance with all local, state and federal regulations. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. If approved, may be transferred to a land disposal site.

NOTE: Review FIRE-FIGHTING MEASURES and HANDLING AND STORAGE sections before proceeding with cleanup. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during cleanup. *FreeBlast* is amorphous, inert, stable, and hazardous polymerization will not occur.

Respiratory Protection:

If ACGIH's TLV (Threshold Limit Value) of the product or any component is exceeded, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions.

Abrasive blasting cleaning operations require full flow respiratory protection, or equivalent, to all exposed persons.

Provide sufficient mechanical (local exhaust or general) ventilation to maintain exposure below TLV(s).

Protective Gloves:

Abrasion resistant gloves, for example abrasive blasting.

Eye Protection:

Goggles or other type of safety glasses that are in compliance with OSHA regulations are advised.

Other Protective Equipment:

Use other protective equipment to protect the skin from mechanical abrasion, for example during abrasive blasting. If the material is to be used for abrasive blasting, refer to OSHA regulations for specific requirements.

VII HANDLING AND STORAGE**Precautions to be taken in handling and storing:**

Follow good housekeeping practices to reduce dust emissions. Avoid breathing dust. Wash thoroughly after handling. If handling respirable flour: use of gloves and washing before eating, drinking, applying cosmetics or smoking is advisable to minimize dust inhalation or ingestion from hands.

Store in a dry place.

VIII EXPOSURE CONTROLS/ PERSONAL PROTECTION

Use sufficient ventilation to keep employee exposure below recommended limits. If using this product as an abrasive blasting agent in confined areas, airborne dust levels should be controlled by physical enclosure of the abrasive blasting operation. The enclosure should be exhaust ventilated in accordance with 29 CFR 1910.94 Ventilation (a) Abrasive Blasting.

Ventilation Controls: A NIOSH approved air-purifying respirator with a type 100 (high efficiency) particulate cartridge, or canister may be permissible under certain circumstances-where airborne concentrations are expected to exceed exposure limits. For example abrasive blasting use: a type CE abrasive-blast supplied air respirator covering head, neck and shoulders to provide protection from rebound abrasives per 29 CFR 1910.94 (a)(5).

Engineering Controls: Use proper ventilation (for example exhaust ventilation) as needed, in compliance with OSHA standards 29 CFR 1910.134, or equivalent state standards.

Respiratory Protection:

If TLV of the product or any component is exceeded, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions. If respiratory protection is required, follow the requirements of the Federal OSHA Respiratory Protection Standard (29 CFR 1910.134) or equivalent state standards.

Abrasive blasting cleaning operations require full flow respiratory protection, or equivalent, to all exposed persons.

Provide sufficient mechanical (local exhaust or general) ventilation to maintain exposure below TLV(s).

Permissible Exposure Limits:

OSHA PEL:

Nuisance Dust: 15 mg/m³

Respirable Dust: 5 mg/m³

ACGIH (TLV): 10 mg/m³

Protective Gloves:

Wear any polymer gloves resistant to tears if prolonged exposure is planned. Use abrasion resistant gloves, for example during abrasive blasting.

Eye Protection:

Safety glasses with side shields should be worn as minimum protection from impact. Dust goggles should be worn when excessively dusty conditions are present or anticipated. Goggles or other type of safety glasses that are in compliance with OSHA regulations are advised.

Body Protection:

Use body protection appropriate for the task. Use protective equipment to protect the skin from mechanical abrasion, for example during abrasive blasting. If the material is to be used for abrasive blasting, refer to OSHA regulations for specific requirements.

Exposure Limits:

Permissible Exposure Limits:

OSHA PEL:

Nuisance Dust: 15 mg/m³

Respirable Dust: 5 mg/m³

ACGIH (TLV): 10 mg/m³

IX PHYSICAL AND CHEMICAL PROPERTIES

Common Name: Crushed Glass Abrasive

Contents: C.A.S. #65997-17-3

Appearance: multicolored: fine, medium, and large sized glass (ranging from 2" to granular)

Odor: none

Initial Boiling Point: N/A

Specific Gravity: 2.5 @ 77 Degrees F

Density: Approximately 85 lb/ft³

Melting Point: 2,700° F

Softening Point: 1,345° F

Hardness: 6-6.5 (Mohs Scale)

Vapor Pressure: N/A
Percent Volatiles: N/A
Vapor Density: N/A
Evaporation Rate: N/A

Post- Consumer Cullet Composition			
Material:	Amber	Emerald Green	Flint
SiO ₂	71.4-73.2%	71.5-73.1%	71.6-74.3%
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Be ₂ O ₃	0.22-0.46	0.12-0.20	0.03-0.10
TiO ₂	0.02	0.02	0.02

Generally, R₂O is either Na₂O or K₂O, while RO is from the group CaO, MgO, SrO, or BaO

X STABILITY AND REACTIVITY

Stability: the material is stable. There is no hazardous polymerization.

XI TOXICOLOGICAL INFORMATION

This material is nontoxic and poses little or no hazard. The material is stable.

XII ECOLOGICAL INFORMATION (not mandatory)

Not toxic to mammals, nor to aquatic environments.

XIII DISPOSAL CONSIDERATIONS (not mandatory)

Waste Disposal Method:

Dispose in accordance with all local, state and federal regulations. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. If approved, may be transferred to a land disposal site.

NOTE: Review FIRE-FIGHTING MEASURES and HANDLING AND STORAGE sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up. *FreeBlast* is amorphous, inert, stable, and hazardous polymerization will not occur.

XIV TRANSPORT INFORMATION (not mandatory)

Recycled Glass is not regulated as a hazardous material by DOT or IMO.

Name of Contents: Glass Sand

Constituents: No Hazardous substances present, at regulated levels.

Hazard Class: N/A

UN/ NA Number: N/A

Shipping Containers: Hopper cars, hopper trucks, bags, and semi-bulk bags.

XV REGULATORY INFORMATION (not mandatory)

XI OTHER INFORMATION

The data in this Safety Data Sheet is related only to the specific material designated herein, and does not relate to use in combination with any other material or in any process(es). The information set forth herein is based on technical data that Pearl Aggregate Materials believes to be both accurate, and reliable. It is intended for use by persons having technical skills, and at their own discretion, and risk. Since conditions of use are outside of our (Pearl Aggregate Materials) control, we make no warranties, expressed or implied, and assume no liability in connection with any use of this information. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to "post consumer recycled glass", contained in our products. Recipients of this SDS sheet are advised to confirm in advance of need, that the information is current, applicable, suitable to their circumstances, and in accordance with Federal, Provincial, Municipal, Local, and or National laws and regulations.

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