



GHS SAFETY DATA SHEET (SDS)

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PART # 266 Black BPO Hardener

FIBRE GLAST DEVELOPMENTS CORP.
385 Carr Drive
BROOKVILLE, OH 45309

TELEPHONE: (937) 833-5200
FAX: (937) 833-6555
**FOR CHEMICAL EMERGENCY
CALL (801) 629-0667 24 HRS.**

RECOMMENDED USE: Polymer Reaction Catalyst

SECTION 2 – HAZARDS IDENTIFICATION

Classification

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Skin sensitization	Category 1
Acute aquatic toxicity	Category 1
Organic peroxides	Type E



Signal Word **WARNING**

Hazard Statements

Heating may cause a fire
Very toxic to aquatic life
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction

Precautionary Statements - Prevention

Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing, incompatible materials and combustible materials. Keep only in original container. Avoid breathing dust. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Precautionary Statements - Storage

Protect from sunlight. Store at temperatures not exceeding 25 °C/77 °F. Keep cool. Store away from other materials.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with all local, regional, national and international regulations.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Dibenzoyl peroxide	94-36-0	>50 to <75 <10 ≤5
Zinc Stearate	557-05-1	
Calcium Sulfate	7778-18-9	

SECTION 4 – FIRST AID MEASURES

First Aid Measures**General Advice**

Provide this SDS to medical personnel for treatment. Get Medical advice/attention if you feel unwell.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Skin Contact

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Remove contaminated clothing and shoes.

Inhalation

IF INHALED: Call a POISON Center or doctor if you feel unwell.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

Most Important Symptoms and Effects, both Acute and Delayed

Potential acute health effects

Eye contact	Causes serious eye irritation.
Inhalation	No known significant effects or critical hazards.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Ingestion	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	Adverse symptoms may include pain or irritation, watering, redness.
Inhalation	No specific data.
Skin contact	Adverse symptoms may include irritation, redness.
Ingestion	No specific data.

Indication of any Immediate Medical Attention and Special Treatment Needed, if necessary

Note to Physicians	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable Extinguishing Media	None known.
Specific Hazards Arising from the chemical	Runoff to sewer may create fire or explosion hazard. This material increases the risk of fire and may aid combustion. Heat may cause a fire. May re-ignite itself after fire is extinguished. Hazardous decomposition may occur
Hazardous thermal decomposition products	Decomposition products may include carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides, metal oxide/oxides.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

For non-emergency personal	Avoid breathing vapours or mist. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.
For emergency responders	Use personal protection recommended in Section 8.
Environmental Precautions	Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained

Methods and Material for Containment and Cleaning Up

Prevent further leakage of spillage if safe to do so. Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Dam up. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Take up mechanically, placing in appropriate containers for disposal. Contain and collect spillage with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see sections 13).

SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling

Protective measures	Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Use only with adequate ventilation. Do not breathe dust/fume/gas/vapours/spray. Keep away from clothing and other combustible materials. Keep away from heat, sparks, and open flame.
Advice on general Occupational hygiene	When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Avoid contact with skin, eyes or clothing.

Conditions for Safe Storage Including any Incompatibilities

unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. To avoid the risk of formation of shock-sensitive crystals or loss of stability, it is important to store the product within the recommended temperature range. Temperature control may be required. Store in segregated and approved area. Protect from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Store at temperatures not exceeding 25 °C/77 °F. Keep away from heat, sparks and open flame.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control measures

Occupational exposure limits

Chemical Name	CAS#	Exposure Limits
Dibenzoyl peroxide	94-36-0	ACGIH TLV (United States, 3/2019). TWA: 5 mg/m ³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m ³ 10 hours. OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours.
Zinc Stearate	557-05-1	ACGIH TLV (United States, 3/2019). TWA: 10 mg/m ³ 8 hours. Form: Inhalable fraction TWA: 3 mg/m ³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2016). TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction TWA: 10 mg/m ³ 10 hours. Form: Total OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust
Calcium Sulfate	7778-18-9	ACGIH TLV (United States, 3/2019). TWA: 10 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2016). TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction TWA: 10 mg/m ³ 10 hours. Form: Total OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust

Appropriate Engineering Controls If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Use with adequate ventilation

Environmental exposure controls Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels..

Individual Protection Measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Skin and body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	paste/solid
Appearance	Not determined
Color	Black
Odor	Not determined
Odor Threshold	Not determined
pH	Not determined
Melting Point	Not determined
Boiling Point	100°C (212°F)
Flash Point	Closed cup: 94°C (201.2°F) [Pensky-Martens Closed Cup]
Evaporation Rate	0.09 (butyl acetate = 1)
Upper Flammability Limits	Not determined
Lower Flammability Limit	Not determined
Vapor Pressure	2.3 kPa (17.5 mm Hg) [at 20°C]
Vapor Density	1 [Air = 1]
Relative Density	1.19

SECTION 10 – STABILITY AND REACTIVITY

Reactivity	This product, in laboratory testing, neither detonates nor deflagrates and only shows low or no effect when heated under confinement.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include temperature increase, high temperature. Reactions may include hazardous decompositions, risk of causing fire.
Conditions to Avoid	Avoid all possible sources of ignition (spark or flame). Avoid increased storage temperature.
Incompatible Materials	Reactive or incompatible with combustible materials, reducing materials, copper, iron and rust.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 – TOXICOLOGY INFORMATION

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Dibenzoyl peroxide	LD50 Oral	Rat	6400 mg/kg	-
Zinc stearate	LD50 Oral	Rat	10 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Dibenzoyl peroxide	Eyes – Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin – Severe	Human	-	1344 hours	-
	irritant Skin –	Woman	-	5% I	-
	Moderate irritant			1%	

Sensitization

Not available

Mutagenicity

Not available

Carcinogenicity

Not available

Classification

Product/ingredient name	OSHA	IARC	NTP
Dibenzoyl peroxide	-	3	-

Reproductive toxicity

Not available

Teratogenicity

Not available

Specific target organ toxicity(single exposure)

Not available

Specific target organ toxicity(repeated exposure)

Not available

Aspiration hazard

Not available

Information on Likely Routes of Exposure

Eye Contact: Causes serous eye irritation

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Inhalation: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include pain or irritation, watering, redness.

Inhalations: No specific data.

Skin contact: Adverse symptoms may include irritation and redness.

Ingestion: No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

SECTION 12 – ECOLOGICAL INFORMATION**Toxicity**

Product/ingredient	Result	Species	Exposure
Calcium Sulfate	Acute EC50 3200000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute LC50 >1910 mg/l Fresh water	Crustaceans – Ceriodaphnia dubia	48 hours
	Acute LC50 >1970 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2980000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Chronic NOEC 360 mg/l Fresh water	Daphnia - Daphnia magna -	3 weeks
	Chronic NOEC 233 mg/l Fresh water	Neonate Fish - Coregonus albula -	60 days
		Egg	

Very toxic to aquatic life

Marine Pollutant - This material meets the definition of a marine pollutant.

Environmental Precautions – Prevent product from entering drains.

Persistence and Degradability No information available

Bioaccumulative potential No information available

Mobility in soil - No information available

Other adverse effects - No information available

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by- products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements and all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 – TRANSPORT INFORMATION

DOT

UN Proper Shipping Name	UN proper shipping name UN3108, ORGANIC PEROXIDE TYPE E, SOLID (<52% Dibenzoyl Peroxide)
Hazard Class	5.2
Packing Group	Not applicable
Special Provisions	Emergency Response Guide Number - 145

IATA

UN Proper Shipping Name	UN proper shipping name UN3108, ORGANIC PEROXIDE TYPE E, SOLID (<52% Dibenzoyl Peroxide)
Hazard Class	5.2
Packing Group	Not applicable
Special Provisions	A20, A802

IMDG

UN Proper Shipping Name	UN proper shipping name UN3108, ORGANIC PEROXIDE TYPE E, SOLID (<52% Dibenzoyl Peroxide)
Hazard Class	5.2
Packing Group	Not applicable

Special Provisions	122, 274 EmS-no F-J, S-R
Environmental Hazard	Marine pollutant – This material meets the definition of a marine pollutant. Dibenzoyl peroxide, Zinc Stearate.
Special precautions for user:	Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

SECTION 15 - REGULATORY INFORMATION

U.S. Feral regulations

TSCA

United States inventory (TSCA 8b): All components are active or exempted.

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

International lists

Canadian DSL

All components listed or exempted.

SECTION 16 – OTHER INFORMATION

Revision Date

8/8/2023

HMIS	Health Hazards	Flammability	Physical Hazards
	3	0	4

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with **Fibre Glast Developments Corporation** or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.