



## GHS SAFETY DATA SHEET (SDS)

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT:** Part #684 Neutral Gel Coat

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.**

### SECTION 2 – HAZARDS IDENTIFICATION

#### GHS Classification

Flammable liquids : Category 2

Combustible Dust :

Skin irritation : Category 2

Eye irritation : Category 2A

Skin sensitization : Category 1

Carcinogenicity : Category 1A

Reproductive toxicity : Category 2

Specific target organ systemic toxicity-single exposure : Category 3 (Respiratory system)

Specific target organ systemic system toxicity-repeated exposure (inhalation) : Category 1 (Auditory system)

#### GHS Label element

##### Hazard pictograms

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Signal Word : Danger

Hazard Statements

: Highly flammable liquid and vapor.  
May form combustible dust concentrations in air.  
Causes skin irritation.  
May cause and allergic skin reaction.  
Causes serious eye irritation.  
May cause respiratory irritation.  
May cause cancer.  
Suspected of damaging fertility or the unborn child.  
Causes damage to organs (Auditory system) through prolonged or repeated exposure if inhaled.

Precautionary Statements

: **Prevention:**  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat/sparks/open flames/hot surfaces. –No smoking  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/ equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not breathe dust/fume/gas/mist/ vapors/ spray  
Wash skin thoroughly after handling.  
Do not eat, drink, or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing must not be allowed out of the work place.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Keep dust/air mixtures away from ignition sources.  
Hazardous polymerization can occur under certain conditions. Avoid excessive heat, direct sunlight, peroxides, and other polymerization catalysts. Store in a cool place and maintain proper concentrations of inhibitor and oxygen.

**Response:**

IF ON SKIN (or h air): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF exposed or concerned: Get medical advice/attention.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash before reuse.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.  
Store in a well-ventilated place. Keep cool  
Store locked up.

**Disposal:**

Dispose of contents/container to an approved waste disposal plant.

**Other hazards**

Static Accumulated liquid

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## SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

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Substance/Mixture

: Mixture

Chemical nature : Static Accumulator

Chemical nature : Defatter

#### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
STYRENE	100-42-5	Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT SE 3; H335 STOT RE 1; H372 Asp. Tox. 1; H304	30.04
TALC	14807-96-6	This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012)	21.49
METHYLMETHACRYLATE	80-62-6	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Skin Sens. 1B; H317 STOT SE 3; H335	9.32
QUARTZ (SiO2)	14808-60-7	Carc. 1A; H350 STOT RE 1; H372	0.21
COBALT 2-ETHYLHEXANOATE	136-52-7	Eye Irrit. 2A; H319 Skin Sens. 1A; H317 Repr. 2; H361	0.14

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## SECTION 4 – FIRST AID MEASURES

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General Advice : Move out of dangerous area.  
Call a POISON CENTRE or doctor/physician if exposed or you feel unwell.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

If inhaled : Move to fresh air.  
IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.  
Keep patient warm and at rest.  
If unconscious place in recovery position and seek medical advice.

In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention. If on skin, rinse well with water.  
Wash contaminated clothing before re-use. If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.

	Remove contact lenses. Protect unharmed eye.
If swallowed	: Obtain medical attention. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and Effects, both acute and delayed	: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause cancer. Suspected of damaged fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure if inhaled. Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways) Cough Effects on memory Loss of appetite Shortness of breath Confusion Pain in the hands and feet Difficulty breathing
Notes to physician	: No hazards which require special first aid measures.

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## SECTION 5 – FIRE-FIGHTING MEASURES

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Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and surrounding environment. Water spray Form Alcohol-resistance foam Carbon dioxide (CO <sub>2</sub> ) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not allow run-off from firefighting to enter drains or water courses. Organic dusts at sufficient concentration can form explosive mixtures in air.
Hazardous combustion products	: Hydrocarbons Carbon dioxide and carbon monoxide Toxic fumes
Specific extinguishing methods	: Product is compatible with standard firefighting agents.
Further information	: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.

Polymerization will take place under fire conditions. If polymerization occurs in a closed container, there is a possibility it will rupture violently. Cool storage container with water, if exposed to fire.

Special protective equipment for Firefighters

: In the event of fire, wear self-contained breathing apparatus.

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## SECTION 6 – ACCIDENTAL RELEASE MEASURES

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Personal precautions, protective Equipment and emergency procedures

: Evacuate personnel to safe areas.  
Remove all sources of ignition.  
Use personal protective equipment.  
Ensure adequate ventilation.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Persons not wearing protective equipment should be excluded from the area of spill until clean-up has been completed.

Environmental precautions

: Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up

: Contain spillage, and then collect with non-combustible absorbent material , (e.g. sand, earth, diatomaceous earth, vermiculite)and place in container for disposal according to local/national regulations (see section 13)

Other information

: Comply with all applicable federal, state, and local regulations.  
Suppress (knock down) gases/vapours/mists with a water spray jet.

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## SECTION 7 – HANDLING AND STORAGE

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Advice on safe handling

: Open drum carefully as content may be under pressure. Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms. Do not breathe vapours/dust. Do not smoke. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Dispose of rinse water in accordance with local and national regulations. Container hazardous when empty. Take precautionary measures against static discharges. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Secondary operations, such as grinding and sanding, may produce dust. Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards. For further guidance on prevention of dust explosions, refer to National Fire Protection Association (NFPA) 654: "Standard for the Prevention of Fire and Dust Explosions, from the Manufacturing, Processing and Handling of Combustible Particulate Solids".

Conditions for safe storage

: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. No smoking. Electrical installations / working materials must comply with the technological safety standards.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of Exposure)	Control parameters/Permissible concentration	Basis
STYRENE	100-42-5	TWA	20 ppm	ACGIH
		STEL	40 ppm	ACGIH
		REL	50 ppm 215 mg/m <sup>3</sup>	NIOSH/GUIDE
		STEL	100 ppm 425 mg/m <sup>3</sup>	NIOSH/GUIDE
		TWA	100 ppm	OSHA/Z2
		Ceiling	200 ppm	OSHA/Z2
TALC	14807-96-6	Max.conc	600 PPM	Osha/z2
		TWA	2 mg/m <sup>3</sup> Respirable fraction.	ACGIH
		REL	2 mg/m <sup>3</sup> Respirable fraction	NIOSH/GUIDE
		TWA	0.1 mg/m <sup>3</sup> Respirable	Z3
		TWA	0.3 mg/m <sup>3</sup> Total dust	Z3
METHYLMETHACRYLATE	80-62-6	TWA	50 ppm	ACGIH
		STEL	100 ppm	ACGIH
		REL	100 ppm 410 mg/m <sup>3</sup>	NIOSH/GUIDE
		PEL	100 ppm 410 mg/m <sup>3</sup>	OSHA_TRANS
		TWA	50 ppm	ACGIHLIS_P
		STEL	100 ppm	ACGIHLIS_P
QUARTZ	14808-60-7	TWA	0.025 mg/m <sup>3</sup> Respirable fraction	ACGIH
		REL	0.05 mg/m <sup>3</sup> Respirable fraction	NIOSH/GUIDE
		TWA	0.1 mg/m <sup>3</sup> Respirable	Z3
		TWA	0.3 mg/m <sup>3</sup> Total dust	Z3
		TWA	0.1 mg/m <sup>3</sup> Respirable dust.	TN OEL
COBALT 2-ETHYLHEXANOATE	136-52-7	TWA	0.02 mg/m <sup>3</sup> (as Co)	PY OEL
		TWA	0.02 mg/m <sup>3</sup> (as Co)	ACGIH

### Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological Specimen	Sampling time	Permissible concentration	Basis
STYRENE	100-42-5	Mandelic acid plus phenylglyoxylic acid	Urine	Sampling time: End of shift.	400 mg/g Creatinine	ZUS_A CGIHB

		Styrene	urine	Sampling time: End of shift	40 µ/l	ZUS_A CGIHB
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**Engineering measures**

: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Provide appropriate exhaust ventilation at places where dust is formed.

**Personal protective equipment**

Respiratory protection

: In the case of vapour formation use a respirator with an approved filter.  
A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if over exposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection  
Remarks

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection

: Wear as appropriate:  
Impervious clothing  
Safety shoes  
Flame-resistant clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Discard gloves that show tears, pinholes, or signs of wear.  
Wear resistant gloves (consult your safety equipmentsupplier).

Hygiene measures

: Wash hands before breaks and at the end of the workday.  
When using do not eat or drink.  
When using do not smoke.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

Physical state

: liquid

Odour

: pungent

Odour Threshold

: No data available

pH

: No data available

Melting point/freezing point

: No data available

Boiling point/boiling range

: 212.0 °F / 100.5 °C  
(1,013.25 hPa)  
Calculated phase Transition Liquid/Gas

Flash point

: 55 °F / 13 °C

	Method: Seta closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: May form combustible dust concentrations in air (during processing).
Flammability (liquids)	: Static Accumulating liquid
Flammability (liquids) Upper explosion limit	: : Upper flammability limit 12.5% (V) Method: Calculated Explosive Limit
Lower explosion limit	: lower flammability limit 1.1% (V) Method: Calculated Explosive Limit
Vapour pressure	: 37.2 hPa (20 °C) Calculated Vapor Pressure
Density	: 1.138 g/cm <sup>3</sup> (25°C)
Solubility (ies) Water solubility	: insoluble
Viscosity Viscosity, kinematic	: > 20.5 mm <sup>2</sup> /s (40 °C)

## SECTION 10 – STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous Reactions	: Hazardous polymerization may occur. Vapours may form explosive mixture with air. This product does not present a dust explosion hazard as delivered. However, fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard.
Conditions to avoid	: Heat, flames and sparks.  Exposure to air. Exposure to sunlight. Exposure to moisture.
Incompatible materials	: Acids Aluminum Aluminum chloride Amines Bases Copper Copper alloys Halogens Iron chloride Metal salts Nitrates Reducing agents Strong alkalis Strong oxidizing agents



UV light  
Peroxides

Hazardous decomposition

Products carbon dioxide and carbon monoxide Hydrocarbons  
toxic fumes

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## SECTION 11 – TOXICOLOGICAL INFORMATION

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Information on likely routes of Exposure : Inhalation  
Skin contact  
Eye contact  
Ingestion

### Acute toxicity

Not classified based on available information.

### **Components:**

#### **STYRENE:**

Acute oral toxicity : LD50 Oral (rat): > 2,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 11.8 mg/l, 2770 ppm  
Exposure time: 4 h  
Test atmosphere: vapour

No observed adverse effect level (Humans): 100 ppm  
Exposure time: 7 h  
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline402  
Assessment: No adverse effect has been observed in acute  
Dermal toxicity tests.

#### **METHYLMETHACRYLATE:**

Acute oral toxicity : LD 50 (Rat): 7,800 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 29.8 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg

#### **COBALT 2-ETHYLHEXANOATE:**

Acute oral toxicity : LD 50(Rat, Female): ca. 3,129 mg/kg

Acute inhalation toxicity : LC 50 (Rat): > 10 mg/l  
Exposure time: 1 h  
Test atmosphere: dust/mist  
Assessment: Not classified as acutely toxic by inhalation  
under GHS.

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg

### **Skin corrosion/irritation**

Causes skin irritation

### **Product:**

Remarks: May cause skin irritation and/or dermatitis. Individuals with direct skin contact with methyl methacrylate have experienced temporary loss of feeling and mid nerve damage in the fingers.

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

STYRENE:

Species: Rabbit

Result: Irritating to skin

Species: human skin

Result: No skin irritation

TALC:

Result: Possibly irritating to skin

METHYLMETHACRYLATE:

Result: irritating to skin

QUARTZ (SiO<sub>2</sub>):

Result: Possibly irritating to skin

COBALT 2-ETHYLHEXANOATE:

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Causes serious eye irritation.

**Components:**

STYRENE:

Results: Irritating to eyes

Remarks: Vapour during processing may be irritating to the respiratory tract and to the eyes.

TALC:

Result: Possibly irritating to eyes.

METHYLMETHACRYLATE:

Result: Slightly irritating to eyes

QUARTZ/SAND:

Result: Possibly irritating to eyes

COBALT 2-ETHYLHEXANOATE:

Species: Rabbit

Result: Irritating to eyes

Method: OECD Test Guideline 405

**Respiratory or skin sensitization**

Skin sensitization: May cause an allergic skin reaction.

Respiratory sensitization: Not classified based on available information.

**Components:**

STYRENE:

Exposure routes: Skin contact

Species: Guinea pig

Assessment: Does not cause skin sensitization.

Result: negative

Exposure routes: inhalation (vapour)

Species: Humans

Assessment: Does not cause respiratory sensitization.

Result: negative

METHYLMETHACRYLATE:

Test Type: Local lymph node assay  
Species: Mouse  
Assessment: The product is a skin sensitizer, sub-category 1B.  
Method: OECD Test Guideline 429

COBAL 2-ETHYLHEXANOATE:  
Test Type: Local lymph node assay  
Species: Mouse  
Assessment: The product is a skin sensitizer, sub-category 1A.  
Method: OECD Test Guideline 429

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**COBAL 2-ETHYLHEXANOATE:**

**Genotoxicity in vitro**

: Test Type: Ames test  
Result: negative

Genotoxicity in vivo

: Test Type: In vivo micronucleus test  
Result: negative

**Carcinogenicity**

May cause cancer.

**Product:**

Carcinogenicity -  
Assessment

: Styrene has been tested for carcinogenicity in rats and mice.  
Styrene caused lung tumors in mice only. These tumors are not  
considered to be relevant to humans.

**Components:**

QUARTZ (SiO<sub>2</sub>)

Carcinogenicity -  
Assessment

: Human carcinogen

**Reproductive toxicity**

Suspected of damaging fertility or the unborn child.

**Components:**

COBAL 2-ETHYLHEXANOATE:

Reproductive toxicity -  
Assessment

: Some evidence of adverse effects on sexual function and fertility,  
and/or on development, based on animal experiments.

**STOT – single exposure**

May cause respiratory irritation.

**Components:**

STYRENE:

Assessment: May cause respiratory irritation.

METHYLMETHACRYLATE:

Target Organs: Upper respiratory tract

Assessment: May cause respiratory irritation.

**STOT – repeated exposure**

Causes damage to organs (Auditory system) through prolonged or repeated exposure if inhaled.

**Components:**

STYRENE:

Exposure routes: inhalation (vapour)

Target Organs: Auditory system

Assessment: Causes damage to organs through prolonged or repeated exposure.

QUARTZ (SiO<sub>2</sub>):

Exposure routes: inhalation (dust/mist/fume)

Target Organs: Respiratory system, Kidney

Assessment: Causes damage to organs through prolonged or repeated exposure.

**Repeated dose toxicity**

**Components:**

STYRENE: Species: Human

85 mg/m<sup>3</sup>  
Application Route: inhalation (vapour)

Species Human  
615 mg/kg  
Application Route: Skin contact

**Aspiration toxicity**  
Not classified based on available information.

**Components:**  
STYRENE:  
May be fatal if swallowed and enters airways.

**Further information**  
**Product:**  
Remarks: Solvents may degrease the skin.

**Components:**  
QUARTZ (SiO<sub>2</sub>)  
Remarks: Lung

**Carcinogenicity:**  
**IARC**

Group 1: Carcinogenic to humans	
QUARTZ/SAND	14808-60-7
Group 2B: Possibly carcinogenic to humans	
STYRENE	100-42-5
TALC	14807-96-6
COBALT 2-ETHYLHEXANOATE	136-52-7

**OSHA**  
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogens by OSHA.

**NTP**  
Known to be human carcinogen

QUARTZ/SAND	14808-60-7
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Reasonably anticipated to be a human carcinogen

STYRENE	100-42-5
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## SECTION 12 – ECOLOGICAL INFORMATION

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**Eco-toxicity**  
**Product:**  
Ecotoxicology Assessment  
Acute aquatic toxicity

: Acute aquatic toxicity Category 2; Toxic to aquatic life.

Chronic aquatic toxicity

: Chronic aquatic toxicity Category 3; Harmful to aquatic life with long lasting effects.

**Components:**  
STYRENE:

Toxicity to fish : LC 50 (Pimephales promelas (fathead minnow)): 4.02 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other Aquatic invertebrates	: EC 50 (Water flea (Daphnia magna)): 4.7 mg/l Exposure time: 48 h
Toxicity to algae	: ErC50 (Pseudokirchneriella subcapitata (green algae)): 4.9 mg/l Exposure time: 72 h
Toxicity to daphnia and other Aquatic invertebrates (Chronic toxicity)	: NOEC (Water flea (Daphnia magna)): 1.01 mg/l Exposure time: 21 d
Toxicity to bacteria	: EC 50 (activated sludge): ca. 500 mg/l Exposure time: 0.5 h
Toxicity to soil dwelling Organisms	: NOEC (Eisenia fetida (earthworms)): 34 mg/kg Exposure time: 14 d Method: OECD Test Guideline 207
METHYLMETHACRYLATE: Toxicity to fish	: LC 50 (Fathead minnow (Pimephales promelas)): 130 mg/l Exposure time: 96 h Method: Static  LC 50 (Oncorhynchus mykiss (rainbow trout)): > 79 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to daphnia and other Aquatic invertebrates	: EC 50 (Water flea (Daphnia magna)): 69 mg/l Exposure time 48 h Test Type: flow-through test
Toxicity to algae	: EC 50 (Pseudokirchneriella subcapitata (algae)): > 110 mg/l Exposure time: 72 h Test type: Static
Toxicity to fish (Chronic Toxicity)	: LC 50 (Danio rerio (zebra fish)): 33.7 mg/l Exposure time: 35 d Test Type: flow-through test Method: OECD Test Guideline 210
Toxicity to daphnia and other Aquatic invertebrates (Chronic toxicity)	: NOEC (Water flea (Daphnia magna)): 37 mg/l Exposure time: 21 d Test Type: flow-through test Method: OECD Test Guideline 211
COBALT 2-ETHYLHEXANOATE: M-Factor (Acute aquatic Toxicity)	1
Ecotoxicology Assessment Acute aquatic toxicity	: Acute aquatic toxicity Category 1
Chronic aquatic toxicity	: Chronic aquatic toxicity Category 3
<b>Persistence and degradability</b>	
<b>Components:</b>	
STYRENE:	
Biodegradability	: Result: Readily biodegradable Biodegradation: > 60% Exposure time: 10 d
METHYLMETHACRYLATE:	
Biodegradability	: Result: Readily biodegradable

Biodegradation: 94.3%  
Exposure time: 14 d  
Method: OECD Test Guideline 301C

COBALT 2-ETHYLHEXANOATE:  
Biodegradability

: Result: Readily biodegradable  
Biodegradation: 60%  
Exposure time: 10 d  
Method: OECD Test Guideline 301B

### Bio accumulative potential

#### **Components:**

STYRENE:

Bioaccumulation : Bio concentration factor (BCF): < 100

Partition coefficient: n-octanol/water : log Pow: 2.96 (25 °C)

METHYLMETHACRYLATE:

Partition coefficient: n-octanol/water : low Pow: 1.38

### Mobility in soil

#### **Components:**

STYRENE:

Distribution among Environmental compartments : Koc: 352

### Other adverse effects

#### **Product:**

Additional ecological Information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

#### **Components:**

STYRENE:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bio-accumulating and toxic (PBT). This substance is not considered to be very persistent and very bio-accumulating (vPvB).

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## SECTION 13 – DISPOSAL CONSIDERATIONS

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### Waste disposal methods

General advice

: Dispose of in accordance with all applicable local, state and federal regulations.

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## SECTION 14 – TRANSPORT INFORMATION

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### International transport regulations

#### REGULATION

ID NUMBER	PROPER SHIPPING	*HAZARD	SUBSIDIARY	PACKING	MARINE
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	NAME	CLASS	HAZARDS	GROUP	POLLUTANT / LTD. QTY
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**U.S. DOT – ROAD**

UN 1866	Resin Solution	3		II	
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**U.S. DOT - RAIL**

UN 1866	Resin Solution	3		II	
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**U.S. DOT – INLAND WATERWAYS**

UN 1866	Resin Solution	3		II	
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**TRANSPORT CANADA – ROAD**

UN 1866	Resin Solution	3		II	
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**TRANSPORT CANADA – RAIL**

UN 1866	Resin Solution	3		II	
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**TRANSPORT CANADA – INLAND WATERWAYS**

UN 1866	Resin Solution	3		II	
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**INTERNATIONAL MARITIME DANGEROUS GOODS**

UN 1866	Resin Solution	3		II	
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

UN 1866	Resin Solution	3		II	
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

UN 1866	Resin Solution	3		II	
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**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

UN 1866	RESINA, SOLUCIONES DE	3		II	
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\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutants		yes
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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15 – REGULATORY INFORMATION**

**EPCRA – Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product (RQ) (lbs)
STYRENE	100-42-5	1000	3328.252202

**SARA 311/312 Hazards**

- : Reactivity Hazard
- Acute Health Hazard
- Chronic Health Hazard
- Fire Hazard

**SARA 313 Component(s)**

STYRENE	100-42-5	30.04%
METHYLMETHACRYLATE	80-62-6	9.32%

COBALT 2-ETHYLHEXANOATE	136-52-7	0.14%
COBALT NEODECANOATE	27253-31-2	0.02%
COBALT HYDROXIDE	21041-93-0	0.01%

**California Prop 65**

WARNING! This product contains a chemical known to the State of California to cause cancer.

STYRENE	100-42-5
TALC	14807-96-6
QUARTZ/SAND	14808-60-7
BENZENE	71-43-2
ETHYL BENZENE	100-41-4
FORMALDEHYDE	50-00-0
1,4-DIOXANE	123-91-1
ACETALDEHYDE	75-07-0
ETHYLENE OXIDE	75-21-8
1,3, BUTADIENE	106-99-0

WARNING: This product contains a chemicals known to the State of California to cause birth defects or other reproductive harm.

BENZENE	71-43-2
ETHYLENE OXIDE	75-21-8
TOLUENE	108-88-3
1,3, BUTADIENE	106-99-0
METHYL CHLORIDE	74-87-3

**The components of this product are reported in the following inventories:**

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL.
AUSTR	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECL	: On the inventory, or in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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**SECTION 16 – OTHER INFORMATION**

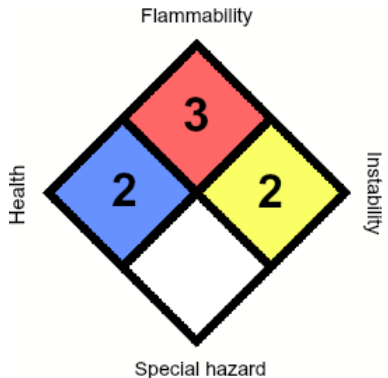
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## Revision Date

August 28, 2019

### Further information

NFPA:	HMIS III:						
	<table border="1"><tbody><tr><td>HEALTH</td><td>22*</td></tr><tr><td>FLAMMABILITY</td><td>3</td></tr><tr><td>PHYSICAL HAZARD</td><td>2</td></tr></tbody></table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	HEALTH	22*	FLAMMABILITY	3	PHYSICAL HAZARD	2
HEALTH	22*						
FLAMMABILITY	3						
PHYSICAL HAZARD	2						

### NFPA Flammable and Combustible Liquids Classification

Flammable Liquid Class IB

### Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H361	Suspected of damaging fertility of the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure if inhaled.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet:

ACGIH: American Conference of Industrial Hygienists  
BEI: Biological Exposure Index  
CAS: Chemical Abstracts Service (Division of the American Chemical Society).  
CMR: Carcinogenic, Mutagenic or Toxic for Reproduction  
FG: Food grade  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
H-statement: Hazard Statement  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association: (IATA)

ICAO: International Civil Aviation Organization  
ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"  
IMDG: International Maritime Code for Dangerous Goods  
ISO: International Organization for Standardization  
logPow: octanol-water partition coefficient  
LCxx: Lethal Concentration, for xx percent of test population  
LDxx: Lethal Dose, for xx percent of test population

ICxx: Inhibitory Concentration for xx of a substance  
Ecxx: Effective Concentration of xx  
N.O.S.: Not Otherwise Specified

OECD: Organization for Economic Co-operation and Development  
OEL: Occupational Exposure Limit  
P-Statement: Precautionary Statement  
PBT: Persistent, Bio-accumulative and Toxic  
PPE: Personal Protective Equipment  
STEL: Short-term exposure limit  
STOT: Specific Target Organ Toxicity  
TLV: Threshold Limit Value  
TWA: Time-weighted average  
vPvB: Very Persistent and Very Bio-accumulative  
WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act  
DOT: Department of Transportation  
FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act  
HMIRC: Hazardous Materials Information Review Commission  
HMIS: Hazardous Materials Identification System  
NFPA: National Fire Protection Association  
NIOSH: National Institute for Occupational Safety and Health  
OSHA: Occupational Safety and Health Administration  
PMRA: Health Canada Pest Management Regulatory Agency  
RTK: Right to Know  
WHMIS: Workplace Hazardous Materials Information System

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.