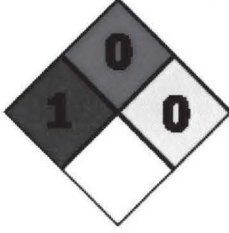



Glasweve HT (uncoated material / loom state)

Revision Date 2011-04-18

Classification	NFPA	PPE Personal Protection Equipment	Transport Symbol
			

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name Glasweve HT (uncoated material / loom state)
Commodity code 11008 - GW
Synonym OSM 27; OSM 28; OSM 31; OS 600, Glasweave HT
Product description Woven fiberglass fabric.
Product use Fiberglass filter.

Manufacturer or supplier's details

Pyrotek Inc.
 9503 E. Montgomery Avenue
 Spokane Valley, WA 99206 USA
 Phone: (509) 926-6212
 Fax: (509) 927-2408

Email: MSDS@pyrotek-inc.com
 REACH email: REACH@pyrotek-inc.com

Emergency telephone number

Chemtrec North America (800) 424-9300,
 Chemtrec Outside North America +1 703 527 3887

2. HAZARDS IDENTIFICATION

Physical state	Solid	
Appearance	Weave.	Odor Odorless
Classification	-	
Symbol(s)	In accordance with Directive EC 1272/2008 and its amendments, this substance does not need to be classified nor labelled	R -phrase(s) None

See Section 11 for additional Toxicological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Names	CAS-No	EINECS-No.	Weight %	Classification
Fibrous Glass	65997-17-3	266-046-0	100%	-

For the full text of the R phrases mentioned in this Section, see Section 16

Further information

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust or vapors).

Synthetic vitreous fibers (SVF) are fibrous inorganic substances classified into three general groups: fibrous glass (glasswool and glass filament), mineral wool (rockwool and slagwool), and refractory ceramic fibers (RCF). Devitrification (conversion of fibers to a crystalline state) may occur when SVF materials are exposed to high temperatures producing disordered crystalline silica forms.

Crystalline silica (SiO₂) exists in several forms: quartz, cristobalite and tridymite. Fused silica (non-crystalline quartz), if heated to more than 1200°C (2192°F) for an extended period, converts to crystalline silica in the form of tridymite. As heated crystalline silica slowly cools, its form can change. When cooled to approximately 870°C (1598°F), it can take on the form of crystalline quartz. Continued cooling below 573°C (1063°F) can change the form to cristobalite. However, more rapid cooling from a high temperature may solidify any form of crystalline silica at normal temperatures.

Prolonged exposure to respirable crystalline silica may cause delayed (chronic) lung injury known as silicosis. Silicosis is a form of disabling pulmonary fibrosis, which can be progressive and may lead to death.

The OSHA PEL for crystalline silica as tridymite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz) - 0.1 mg/m³.

4. FIRST AID MEASURES

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash off with soap and water. If skin irritation persists, call a physician.

Ingestion Not a normal route of exposure. Consult a physician if necessary.

Inhalation Move to fresh air. If symptoms persist, call a physician.

5. FIRE-FIGHTING MEASURES

Flammable properties None known

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding fire

Unsuitable extinguishing media None known

Specific hazards arising from the chemical None known

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Australian Hazchem Code None known

NFPA Health 1 Flammability - Instability -

HMIS Health 1 Flammability - Instability -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Use personal protective equipment. Avoid dust formation.

Environmental precautions Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up Vacuum or wet sweep. Avoid dust formation. Shovel into suitable container for disposal.

7. HANDLING AND STORAGE

Handling Avoid dust formation.

Storage Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

Chemical Names	ACGIH TLV	OSHA PEL	Argentina	Australia	Austria
Fibrous Glass	TWA: 1 fiber/cm ³	Ceiling: 5 mg/m ³ Listed	TWA: 0.05 mg/m ³ TWA: 1 fiber/cm ³ TWA: 5 mg/m ³	10 mg/m ³ STEL 5 mg/m ³ TWA 1 mg/m ³ TWA 0.5 mg/m ³ TWA 0.5 fibres/mL TWA 0.1 mg/m ³ TWA 0.01 mg/m ³ TWA	STEL: 0.3 mg/m ³ STEL: 0.4 mg/m ³ STEL: 0.5 mg/m ³ STEL: 1 mg/m ³ STEL: 1.5 mg/m ³ STEL: 2 mg/m ³ STEL: 4 mg/m ³ MAK: 0.1 mg/m ³ MAK: 0.25 mg/m ³ MAK: 0.5 mg/m ³ MAK: 1 mg/m ³ MAK: 5 mg/m ³

Chemical Names	Belgium	Brazil	Bulgaria	Chile	China
Fibrous Glass	Not Listed	TWA: 1 mg/m ³ TWA: 5 mg/m ³	TWA: 10.0 mg/m ³ TWA: 1.0 mg/m ³ TWA: 0.5 mg/m ³ TWA: 0.3 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.05 mg/m ³ STEL: 3.0 mg/m ³	TWA: 0.08 mg/m ³ TWA: 0.12 mg/m ³ TWA: 0.16 mg/m ³ TWA: 1 fiber/cm ³ TWA: 4 mg/m ³	STEL: 0.02 mg/m ³ STEL: 0.3 mg/m ³ STEL: 0.45 mg/m ³ STEL: 1.5 mg/m ³ STEL: 10 mg/m ³ TWA: 0.01 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.15 mg/m ³ TWA: 0.5 mg/m ³ TWA: 5 mg/m ³

Chemical Names	Croatia	Czech Republic	Denmark	Egypt	Estonia
Fibrous Glass	STEL: 10 mg/m ³ STEL: 0.6 mg/m ³ Listed	Potential for cutaneous absorption	TWA: 0.005 mg/m ³ TWA: 0.05 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.5 mg/m ³ TWA: 1 fiber/cm ³ TWA: 5 mg/m ³	TWA: 5 mg/m ³ TWA: 0.5 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³ TWA: 0.002 mg/m ³ STEL: 10 mg/m ³	TWA: 1 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.05 mg/m ³ TWA: 0.01 mg/m ³

Chemical Names	EU	Finland	France	Germany	Greece
Fibrous Glass	Not Listed	Not Listed	VME: 1 fibre/cm ³	250000 F/m ³ ausgenommen Asbest	TWA: 5 mg/m ³ TWA: 1 mg/m ³ TWA: 0.5 mg/m ³ TWA: 0.25 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.15 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.025 mg/m ³ STEL: 10 mg/m ³ STEL: 0.6 mg/m ³ STEL: 0.1 mg/m ³

Chemical Names	Hungary	Iceland	India	Indonesia	Ireland
Fibrous Glass	TWA: 5 mg/m ³ TWA: 0.5 mg/m ³ TWA: 0.15 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.05 mg/m ³ STEL: 4 mg/m ³ STEL: 20 mg/m ³ STEL: 2 mg/m ³ STEL: 0.6 mg/m ³ STEL: 0.4 mg/m ³ STEL: 0.2 mg/m ³ Ceiling: 0.015 mg/m ³	TWA: 5 mg/m ³ TWA: 0.03 mg/m ³ TWA: 0.05 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.5 mg/m ³ TWA: 1 fiber/cm ³ TWA: 1.0 mg/m ³ TWA: 2.5 mg/m ³ TWA: 0.01 mg/m ³ STEL: 5 mg/m ³ Ceiling: 5 mg/m ³ Ceiling: 0.06 mg/m ³ Ceiling: 0.1 mg/m ³ Ceiling: 0.2 mg/m ³ Ceiling: 0.4 mg/m ³ Ceiling: 1 mg/m ³ Ceiling: 10 mg/m ³ Ceiling: 2 fibers/cm ³ Ceiling: 2 mg/m ³ Ceiling: 0.02 mg/m ³	5 mg/m ³ Ceiling 10 mg/m ³ STEL 5 mg/m ³ TWA 0.2 mg/m ³ TWA 0.15 mg/m ³ TWA	NAB: 0.002 mg/m ³ NAB: 0.005 mg/m ³ NAB: 0.01 mg/m ³ NAB: 0.1 mg/m ³ NAB: 0.2 mg/m ³ NAB: 0.5 mg/m ³ NAB: 10 mg/m ³ NAB: 5 mg/m ³	TWA: 5 mg/m ³ TWA: 2 fibres/ml

Chemical Names	Israel	Italy	Japan	Korea	Lithuania
Fibrous Glass	TWA: 0.002 mg/m ³ TWA: 0.01 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.5 mg/m ³ TWA: 1 fiber/m ³ TWA: 5 mg/m ³	Not Listed	TWA: 0.01 mg/m ³ TWA: 0.05 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.3 mg/m ³ TWA: 1 fiber/cm ³	0.03 mg/m ³ 0.05 mg/m ³ 0.1 mg/m ³ 0.2 mg/m ³ 0.5 mg/m ³ 1 mg/m ³ 10 mg/m ³ 5 mg/m ³	IPRV: 1 mg/m ³ IPRV: 0.5 mg/m ³ IPRV: 0.15 mg/m ³ IPRV: 0.1 mg/m ³ IPRV: 0.07 mg/m ³ IPRV: 0.05 mg/m ³ IPRV: 0.01 mg/m ³

Chemical Names	Luxembourg	Malaysia	Malta	Mexico	Netherlands
Fibrous Glass	TWA: 0.15 mg/m ³ TWA: 0.5 mg/m ³	TWA: 0.002 mg/m ³ TWA: 0.01 mg/m ³ TWA: 0.05 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.5 mg/m ³ TWA: 1 fibres/mL TWA: 5 mg/m ³	TWA: 0.15 mg/m ³	STEL: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 0.5 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.15 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.01 mg/m ³ TWA: 0.002 mg/m ³	TWA: 0.5 mg/m ³

Chemical Names	New Zealand	Norway	Philippines	Poland	Portugal
Fibrous Glass	10 mg/m ³ STEL 5 mg/m ³ TWA 1 mg/m ³ TWA 0.5 mg/m ³ TWA 0.1 mg/m ³ TWA 0.01 mg/m ³ TWA 0.002 mg/m ³ TWA	5 mg/m ³	TWA: 0.15 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.5 mg/m ³ TWA: 5 mg/m ³	Not Listed	TWA: 0.05 mg/m ³ TWA: 1 fiber/cm ³ TWA: 5 mg/m ³

Chemical Names	Romania	Russia	Singapore	Slovak Republic	Slovenia
Fibrous Glass	TWA: 5 mg/m ³ TWA: 1 fiber/cm ³ TWA: 0.10 mg/m ³ TWA: 0.05 mg/m ³ STEL: 10 mg/m ³ STEL: 0.50 mg/m ³ STEL: 0.20 mg/m ³ STEL: 0.10 mg/m ³	0.05 mg/m ³ STEL 4 mg/m ³ TWA 0.05 mg/m ³ TWA 0.01 mg/m ³ TWA	PEL: 5 mg/m ³ PEL: 10 mg/m ³ PEL: 1 mg/m ³ PEL: 0.5 mg/m ³ PEL: 0.2 mg/m ³ PEL: 0.15 mg/m ³ PEL: 0.1 mg/m ³ PEL: 0.002 mg/m ³ STEL: 10 mg/m ³	TWA: 0.05 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.15 mg/m ³ TWA: 0.5 mg/m ³ TWA: 2 fibers/cm ³ TWA: 4 mg/m ³ Ceiling: 0.2 mg/m ³ Ceiling: 1.0 mg/m ³	TWA: 1 mg/m ³ TWA: 0.03 mg/m ³ TWA: 0.05 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.25 mg/m ³ TWA: 0.5 mg/m ³ TWA: 0.015 mg/m ³ TWA: 1 mg/m ³ TWA: 500000 fibers/cm ³ STEL: 4 mg/m ³ STEL: 0.06 mg/m ³ STEL: 0.12 mg/m ³ STEL: 0.2 mg/m ³ STEL: 0.4 mg/m ³ STEL: 1 mg/m ³ STEL: 2 mg/m ³

Chemical Names	South Africa	Spain	Sweden	Switzerland	Taiwan
Fibrous Glass	0.15 mg/m ³ TWA except Tetra-ethyl lead 0.1 mg/m ³ TWA except Arsenic 0.05 mg/m ³ TWA except CdO fumes and CdS 10 mg/m ³ STEL 0.6 mg/m ³ STEL 5 mg/m ³ TWA 0.5 mg/m ³ TWA 0.2 mg/m ³ TWA 0.1 mg/m ³ TWA except Hydrogen telluride	VLA-ED: 1 fiber/cc Fibers with a random orientation, with a content in alkaline and alkali-earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) below 18% in weight	LTV: 1 fiber/cm ³	Not Listed	TWA: 0.05 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.5 mg/m ³ TWA: 5 mg/m ³

Chemical Names	Thailand	Turkey	United Kingdom	Venezuela	
Fibrous Glass	TWA: 0.2 mg/m ³	TWA: 0.15 mg/m ³	STEL: 6 fibres/cm ³ STEL: 0.3 mg/m ³ STEL: 0.45 mg/m ³ STEL: 1.5 mg/m ³ STEL: 10 mg/m ³ STEL: 0.075 mg/m ³ STEL: 15 mg/m ³ TWA: 5 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.15 mg/m ³ TWA: 0.5 mg/m ³ TWA: 2 fibres/cm ³ TWA: 0.025 mg/m ³	TWA: 0.002 mg/m ³ TWA: 0.05 ppm TWA: 0.1 mg/m ³ TWA: 0.2 mg/m ³ TWA: 0.5 mg/m ³ TWA: 1 fiber/cm ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³	

Occupational exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas

PPE

If exposure limits are exceeded or irritation is experienced, the user must determine if any locally approved respiratory protection must be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Proper skin and eye protection should also be determined by the user. Respiratory, skin and eye protection must be provided in accordance with current local regulations. Considerations to aid the user in PPE assessments follow.

Respiratory protection Respiratory protection is not necessary for normal handling of material which does not release dust. Dust mask P3/FFP3 or (P2/FFP2) under dusty conditions.

Eye protection Tightly fitting safety goggles.

Skin protection Protective gloves. Long sleeved clothing.

General industrial hygiene practice Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid	
Appearance	Weave	
Color	White	
Odor	Odorless	
pH	None known	
Flash point	No data available	
Flammability Limits in Air	Upper None known	Lower None known
Specific Gravity	2.1 g/cm ³	

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions
Conditions to avoid	Avoid dust formation.
Materials to avoid	Strong oxidizing agents. Hydrofluoric acid.
Hazardous decomposition products	None known
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

Chemical Names	LD50 Oral	LD50 Dermal	LC50 Inhalation
Fibrous Glass	-	-	-

Potential health effects

Acute effects

Eye irritation	Contact with eyes may cause irritation.
Skin irritation	Substance may cause slight skin irritation.
Ingestion	Not a normal route of exposure.
Inhalation	May cause irritation of respiratory tract.

Chronic toxicity

Chronic toxicity	None known
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Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen:

Chemical Names	ACGIH	NTP	OSHA	IARC	Argentina
Fibrous Glass	A3 A2 A3	Known Carcinogen Reasonably Anticipated	Present	Group 3	A2 A3 - Confirmed animal carcinogen with unknown relevance to humans A4 - Not classifiable as a human carcinogen A2 - Suspected human carcinogen

Chemical Names	Australia	Austria	Belgium	Chile	Croatia
Fibrous Glass	Listed	Group A1 Carcinogen Group A2 Carcinogen	Carcinogen	A3	Not Listed

Chemical Names	Czech Republic	Denmark	Egypt	Estonia	EU
Fibrous Glass	Not Listed	Carcinogen	Listed	Listed	Not Listed

Chemical Names	France	Germany	Hungary	Iceland	Ireland
Fibrous Glass	Not Listed	Kategorie 1 (verursacht Krebs beim Menschen) Kategorie 2 (eingestuft als möglicherweise krebserregend für den Menschen) Kategorie 2 (bioverfügbar, einatembare Stäube/aerosol form) Kategorie 3 (bioverfügbar, einatembare Stäube/aerosol form) Massenkonzentration: 0.05 mg/m ³ Massenfluss: 0.15 g/h	carcinogenic substance	Listed	Category 1 Carcinogen (except Arsine) Category 2 Carcinogen (except Cadmium oxide fume and Cadmium sulphide pigments)

Chemical Names	Italy	Japan	Lithuania	Luxembourg	Mexico
Fibrous Glass	Not Listed	Group 1 - Carcinogenic to Humans (except Ni metal) Group 2B Group 1 - Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans	Listed	Not Listed	Listed

Chemical Names	Netherlands	New Zealand	Norway	Philippines	Poland
Fibrous Glass	Not Listed	A2 - suspected human carcinogen A3 - confirmed animal carcinogen with unknown relevance to humans	Carcinogen	Not Listed	Listed

Chemical Names	Portugal	Romania	Russia	Slovak Republic	Slovenia
Fibrous Glass	A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans A4 - Not Classifiable as a Human Carcinogen	Listed	Listed	Listed	Listed

Chemical Names	South Africa	Spain	Sweden	Switzerland	Taiwan
Fibrous Glass	Listed	Not Listed	Carcinogen	Category C2 carcinogen Category C3 carcinogen	Listed

Chemical Names	United Kingdom	Venezuela			
Fibrous Glass	Not Listed	A3 A4 - Not Classified as a Carcinogen in Humans			

Sensitization

None known

Mutagenic effects	None known
Reproductive effects	None known
Target Organ effects	Respiratory system. Eyes.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects Information follows.

Fibrous Glass

Water Flea Data

48 Hr EC50 *Daphnia magna*: 0.9 µg/L; 96 Hr LC50 *Daphnia magna*: 5 µg/L; 96 Hr LC50 *Hyalella azteca*: 1.4-2.3 µg/L ()

Persistence and degradability	None known
Bioaccumulation	None known
Mobility in Environmental Media	None known

13. DISPOSAL CONSIDERATIONS

Waste disposal methods	Dispose of in accordance with local regulations
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

Not regulated for transport.

15. REGULATORY INFORMATION

Labelling

Symbol(s)

In accordance with Directive EC 1272/2008 and its amendments, this substance does not need to be classified nor labelled

R -phrase(s)

S -phrase(s)

International Inventories

Chemical Names	EINECS	ELINCS	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Fibrous Glass	X	-	X	X	-	X	-	X	X	X

Germany

Overall product WKG Classification:

Component WKG Classification

Chemical Names	Germany Water Classifications
Fibrous Glass	This substance is not classified as dangerous according to German legislation

Switzerland

Switzerland Poison Classification

None known

USA

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product may contain a chemical or chemicals, if listed below, which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous Categorization

Chemical Names **SARA 313 - Threshold Values**

Acute Health Hazard -	Chronic Health Hazard -	Fire Hazard -	Release of Pressure -	Reactive Hazard -
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Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Names	Category	Type
Fibrous Glass (CAS #: 65997-17-3)	Carcinogen Developmental	-

State Right-to-Know

Chemical Names	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Fibrous Glass	X	X	X	X	X

Canada

WHMIS hazard class Non-controlled

Australia

Australian Hazchem Code None known

Poison Schedule Number None known

16. OTHER INFORMATION

Text of R phrases mentioned in Section 3

None

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Revision Date

2011-04-18

Reason for Revision

Product name updated and routine review.

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