



# Safety Data Sheet

JPS Composite Materials Corp. Finished Woven Glass Fabric

SDS No.: 402

Date of Preparation: 3/1/06

Revision: 1/05/18

## SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**PRODUCT/CHEMICAL NAME:** Finished Woven Fiberglass Fabric

**FINISH TYPES:** CS-112, CS-112NPH, CS-210, CS-270, CS-271, CS-330, CS-504, CS-508, CS-509, CS-616, CS-655, CS-657, CS-3597, CS-3754, CS-3770, CS-3906, CS-4681, CS-9383, F4, F11, F12, F13, HT and Greige Finish: Fiberglass or Thorstrand®.

**APPLICATION:** Industrial Applications

**OTHER DESIGNATIONS:** Woven fiberglass fabric using either E-Glass or S2 Glass fibers with a standard or modified starch/oil-based size or binder, completely removed, completely removed and water-washed, partially removed or none removed and woven aluminum-coated fiberglass fabric using E-Glass fibers with a PVA based size, completely removed or none removed.

**COMPANY:** JPS Composite Materials  
2200 S. Murray Ave.,  
P.O. Box 2627,  
Anderson, SC 29624

**PRODUCT INFORMATION:** 1-800-288-0577 (8 am. to 5 pm Eastern Standard Time)

**EMERGENCY PHONE:** 1-800-288-0577

## SECTION 2: HAZARD IDENTIFICATION

\*\*\*\*\*EMERGENCY OVERVIEW\*\*\*\*\*  
**JPS Composite Materials Corp. coated and finished fabrics are stable under normal ambient conditions**

### Potential Health Effects

**GHS classification:**

Skin corrosion property · stimulativeness: Category 2 (irritation to skin)  
 Critical damage and stimulativeness to eye: Category 2B (low irritation to eye)  
 Specified target organ · general toxicity – single exposure: Category 3 (irritating to respiratory tract)

HMIS	
H	1
F	0
R	0
PPE	Sec. 8

**Appearance and Odor:** White fibers or aluminum-coated, white fibers woven into fabric of varying weight, width and thickness, depending on the style, with or without a finish, with no distinctive odor. There may be a sealant applied to the edges of slit fabrics (less-than-full-width) to prevent fibers unwinding during use.

**Statement of Hazard:** Warning! This may cause temporary mechanical irritation of the eyes, skin, or upper respiratory tract. Dust or particulate from machining, grinding, or sawing the cured product may cause skin, eye, and upper respiratory irritation and possible dermatitis.

**Primary Entry Routes:** Eyes—Yes      Skin—Yes      Inhalation—Yes      Ingestion—No  
**HMIS® Rating:** Health—1      Flammability—0      Reactivity—0      Special—None

**Potential Health Effects:**

**Eye:** Contact may cause mechanical irritation to the eyes. Dust or particulate from machining, grinding, or sawing the cured product may cause mechanical irritation.

**Skin:** Contact may cause mechanical irritation to the skin and possible dermatitis at clothing contact pressure points such as cuffs or collars. Dust or particulate from machining, grinding, or sawing the cured product may cause mechanical irritation and possible dermatitis.

**Inhalation:** May cause mechanical irritation to the upper respiratory tract. Dust or particulate from machining, grinding, or sawing the cured product may cause mechanical irritation to the upper respiratory tract.

**Ingestion:** Very unlikely. If a large amount of the product or the dust or particulate from the machining, grinding, or sawing the cured is swallowed, seek medical attention immediately.

**Medical Conditions Aggravated by Exposure:** Pre-existing conditions, such as respiratory or skin disorders, may be aggravated by exposure to the product or to the dust or particulate from machining, grinding, or sawing the cured product.

**Carcinogenic Information:** None of the finish components present in this material at concentrations equal to or greater than 0.1% are listed or regulated by NTP, OSHA, or ACGIH® as a carcinogen. Glass filament is listed by IARC as Group 3 (not classifiable as to a human carcinogen).

<b>Other:</b>	<b>OSHA (PEL)</b>	<b>ACGIH (TLV)</b>
Exposure limits for cured product	15 mg/m <sup>3</sup> (Total)	10 mg/m <sup>3</sup> (Inhalable)
Dust as [Particulate Not Otherwise Regulated (PNOR) by OSHA or Classified (PNOC) by ACGIH®]:	5 mg/m <sup>3</sup> (Respirable)	3 mg/m <sup>3</sup> (Respirable)

**GHS LABEL REQUIREMENTS: None**

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### SECTION 3: INFORMATION ON INGREDIENTS

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Ingredient Name	CAS Number	% wt or % vol
Fiberglass fiber, synthetic, vitreous, continuous filament	65997-17-3	97-99.6%
Thorstrand®: fiberglass fiber, synthetic, vitreous, continuous filament	65997-17-3	54-70%
Aluminum: (For the coating on the fiberglass fiber based on total fabric weight)	7429-90-5	30-46%

Trace Impurities: N/A

Ingredient	OSHA PEL	ACGIH TLV
Fiberglass fiber, synthetic, vitreous, continuous filament	15 mg/m <sup>3</sup> (Total) 5 mg/m <sup>3</sup> (Respirable)	5 mg/m <sup>3</sup> (Inhalable) 1f/cc (Respirable)
Thorstrand®: fiberglass fiber, synthetic, vitreous, continuous filament	15 mg/m <sup>3</sup> (Total) 5 mg/m <sup>3</sup> (Respirable)	5 mg/m <sup>3</sup> (Inhalable) 1f/cc (Respirable)
Aluminum: (For the coating on the fiberglass fiber based on total fabric weight)	15 mg/m <sup>3</sup> (Total) 5 mg/m <sup>3</sup> (Respirable)	10 mg/m <sup>3</sup>

**This product is not classified as a Hazardous Chemical as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

**The exposure limits expressed are for each individual component and not for the total product.**

**The percentage will vary depending on the fabric style and the individual component variation.**

**Where specific exposure limits for component dusts are not established, the levels provided for (Total/Inhalable) dust and (Respirable) fraction reflect the classification of Particulate Not Otherwise Regulated (PNOR) by OSHA or Classified (PNOC) by ACGIH®.**

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### SECTION 4: FIRST AID MEASURES

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, qualified personnel may administer oxygen. Get medical attention immediately.

**Eye:** In case of contact with the product or the cured product dust or particulate, immediately flush with water for 15 minutes, keeping the eyelids open. Get medical attention immediately.

**Skin:** In case of contact with the product or the cured product dust or particulate, immediately wash skin with a mild soap and room temperature to cool running water. Use a washcloth to help remove fibers. To avoid further irritation, do not rub or scratch irritated areas. Rubbing or scratching may force fibers into skin. Get medical attention immediately if the irritation persists.

**Ingestion:** Ingestion of the product or the dust or particulate from it is unlikely. If swallowed, get medical attention immediately.

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### SECTION 5: FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use water spray, dry chemical or CO<sub>2</sub> to extinguish fires.

**PROTECTIVE EQUIPMENT:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face-piece operated in pressure-demand or positive-pressure mode.

**HAZARDOUS COMBUSTION PRODUCTS:** Any sizing, binders or coatings on the fiberglass fabric might form hazardous decomposition products during a sustained fire. Follow fire-fighting procedures and use proper fire-fighting equipment. Handling practices for machining aluminum materials, if aluminum coated fiberglass (Thorstrand®), must be in accordance with NFPA® 651. Dust or particulate from machining, grinding or sawing the product may present a fire or explosion hazard when dispersed and ignited in air. The reaction of aluminum dust or particulate with water produces hydrogen, which is highly flammable.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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Ensure cleanup is done only by trained personnel wearing appropriate personal protective equipment. Do not release runoff from fire control methods to sewers or waterways.

**Procedures in case of Accidental Release or Leakage:** Avoid contact with skin, eyes or clothing (See Section 8). Clean up material, put into a suitable container and dispose of properly (See Section 13).

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## SECTION 7: HANDLING & STORAGE

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**Handling:** Handle properly to prevent the spread of fiberglass dust or fibers.

**Storage:** Store in proper containers to prevent the spread of dusts and fibers. Low humidity levels will increase the spread of dusts and fibers.

**Precautions to be taken in Handling and Storage:** Store in a cool, dry place. Maintain sealed against contamination from dirt and moisture. Keep away from food and drink. Avoid inhalation of filament or dust particulates generated during process operation.

**Regulatory Requirements:** Keep airborne dust and fiber concentrations below regulatory levels.

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## SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTIVE EQUIPMENT

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**Eye /Face Protection:** Avoid eye contact. Wear coverall goggles, as necessary, to prevent irritation, if airborne dust, fibers or particulate are present. Wear safety glasses with side shields, as necessary, if airborne dust, fibers or particulate are present when machining, grinding or sawing the cured product.

**Skin Protection:** Wear protective clothing such as a loose fitting, long sleeved shirt that covers to the base of the neck, long pants and gloves, as necessary, to prevent irritation. Skin irritation is known to occur primarily at pressure points such as around the neck, wrist, waist, and between fingers.

**Ventilation:** Use local exhaust sufficient to control dust, fibers or particulate generated. Ventilation for machining aluminum materials, if aluminum coated fiberglass (Thorstrand®), must be in accordance with NFPA® 651. If exhaust ventilation is not available or is inadequate, use a NIOSH approved dust respirator.

**Respiratory Protection:** Where airborne dusts or fibers exceed the TLV, use NIOSH approved respirator to protect against nuisance dusts. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions and levels of airborne contamination.

**General Hygiene Recommendations:** Before eating, drinking, smoking or using toilet facilities, wash face and hands thoroughly with soap and water. Remove any contaminated clothing and laundry before reuse. Use vacuum equipment to remove fibers, dust or particulate from clothing and work areas. Compressed air is not recommended.

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## SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

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**Appearance and Odor:** White fibers or aluminum-coated, white fibers woven into fabric of varying weight, width and thickness, depending on the style, with or without a finish, with no distinctive odor. There may be a sealant applied to the edges of slit fabrics (less-than-full-width) to prevent fibers unwinding during use.

**Melting Point (°F/°C)**.....Fiberglass: >1292°F/>700°C  
.....Aluminum: 1220°F/>600°C

Specific Gravity (Water=1).....2.50 – 2.90  
pH of Undiluted Product.....Not determined  
Volatile [Percent (%) by Weight].... 0  
Percent (%) VOC.....Same as the % Volatile Content  
Solubility in Water.....Insoluble

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## SECTION 10: STABILITY & REACTIVITY

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**Stability:** Stable under proper handling and storage conditions.

**Incompatible Materials:** Fiberglass: None  
Thorstrand®: Dilute hydrochloric acid, sulfuric acid, potassium hydroxide and sodium hydroxide.

**Products evolved from Heat of Combustion or Decomposition** The products of combustion and decomposition depend on other materials present in the fire and the actual conditions of the fire. Burning (Greige), if applicable, will decompose the finish and release carbon oxides, water, traces of incompletely burned carbon products and other unidentified gases and vapors that may be toxic. Avoid inhalation.

**Hazardous Polymerization:** Will not occur under proper conditions of use. Rapid heating of the product in bulk may produce an uncontrolled exothermic reaction that may char and decompose the finish, generating unidentified gases and vapors that may be toxic. Avoid inhalation.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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**Component Toxicity Data:**  
**Median Lethal Dose (Species):**  
**Oral (LD50)**.....Not Determined  
**Inhalation (LD50)**.....Not Determined  
**Dermal (LD50)**.....Not Determined  
**Irritation Index, Estimation of Irritation (Species):**  
**Skin**.....Not Determined  
**Eyes**.....Not Determined  
**Inhalation**.....Not Determined

**Fiber Toxicity:** Glass Fiber diameter determines whether the fiber is respirable. NOISH has determined that man-made mineral fibers with diameters equal or greater than 3.5 microns are non-respirable. Respirable fibers will penetrate deep into the lungs. All E-glass continuous filament fiberglass have a fiber diameter larger than 3.5 microns and therefore are non-respirable.

**Carcinogenicity:** The following organizations have found that the continuous fiberglass filaments are not considered to be carcinogenic based on human and animal tests conducted within the last 10 years.  
Internal Agency for Research on Cancer- IARC  
American Conference of Governmental Industrial Hygienists – ACGIH  
Occupational Safety and Health Administration - OSHA  
National Toxicity Program NTP 7th Annual Report on Carcinogens

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## SECTION 12: ECOLOGICAL INFORMATION

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**Total Product Data:** No ecological data has been determined on the total product.  
**Component Ecological Data:** No ecological data has been determined on the Greige sizing or the Thorstrand® product.

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## SECTION 13: DISPOSAL CONSIDERATIONS

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**Comply with Federal, State and Local regulation concerning health and environment when disposing of materials.**  
**Waste Disposal Methods:** Material for disposal should be placed in appropriate sealed containers to avoid potential human and environmental exposure. It is the responsibility of the generator to comply with all federal, state, provincial; and local laws and regulations. We recommend that you contact an appropriate waste disposal contractor and environmental agency for relevant laws and regulations. Under the U.S. Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets relevant waste classification.

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## SECTION 14: TRANSPORT INFORMATION

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**DOT:**  
**Proper Shipping Name**.....Not Regulated  
**Hazard Class**.....Not Regulated  
**Identification Number**.....Not Regulated  
**Packing Group**.....Not Regulated  
**Label Required**.....None

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**SECTION 15: REGULATORY INFORMATION**

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**SARA Title III:** Section 302/304 Extremely Hazardous Substance: None  
Section 311 Hazardous Categorization: None  
Section 313 Toxic Chemicals: None

**CERCLA Section 102  
(A) Hazardous Substance:** None

**RCRA Information:** Currently, this product is not listed in federal hazardous waste regulations 40 CFR, Part 261.33, paragraphs (e) or (f), i.e. chemical products that are considered hazardous if they become wastes. State or local hazardous waste regulations may also apply if they are different from the federal regulation. It is the responsibility of the user of the product to determine at the time of disposal, whether the product meets relevant waste classification and to assure proper disposal.

**WHMIS (Canada): Classification:** None  
"This product has been classified in accordance with hazard criteria of the "Controlled Products Regulations" and this SDS contains all the information required by the "Controlled Products Regulations."

**Ingredient Disclosure List:** Fibrous glass (CAS®# 65997-17-3)  
Aluminum, elemental (CAS®# 7429-90-5) Thorstrand® only.

**U.S., EPA, TSCA Information:** This product is an article as defined by TSCA and is not required to be listed in the TSCA Inventory.

**Ozone Depletion Information:** This product does not contain or is not manufactured with ozone depleting substances as identified in Title VI, Clean Air Act "Stratospheric Ozone Protection" and the regulations set forth in 40CFR, Part 82.

**REACH SVHC:** This product does not contain intentionally added (meaning deliberate use in the formulation of a product or subpart where its continued presence is desired to provide a specific characteristic, appearance or quality) materials which are listed on the REACH Substances of Very High Concern (SVHC) list, based on the information supplied by our suppliers

**RoHS:** This product does not contain intentionally added lead, mercury, cadmium, PBB (polybrominated biphenyl) or PBDE (polybrominated diphenyl ether) in amounts greater than 1000 ppm (0.1% by weight) per homogenous material (substance or mixture of substances with uniform composition such as solders, resins, plating's, etc.); cadmium in amounts greater than 75ppm per homogenous, based on the information supplied by our suppliers

**Other:** State and local regulations may have specific requirements for this product or components of this product; consult specific state and local regulatory requirements for additional information.

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**SECTION 16: OTHER INFORMATION**

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**Explanation and Disclaimer:** Wherever such words or phrases as "hazardous," "toxic," "carcinogen," etc. appear herein, they are used as defined or described under state employee right-to-know laws, Federal OSHA laws or the direct sources for these laws such as the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), etc. The use of

such words or phrases should not be taken to mean that we deem or imply any substance or exposure to be toxic, hazardous or otherwise harmful.

Any exposure can only be understood within the entire context of its occurrence, which includes such factors as the substance's characteristics as defined in the SDS, amount and duration of exposures, other chemicals present and pre-existing individual differences in response to the exposure.

The data provided in this SDS is based on the information received from our raw material suppliers and other sources believed to be reliable. We are supplying you this data solely in compliance with the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200 and other Federal and state laws as described in Section 15: Regulatory Information.

The information contained in this SDS is proprietary and confidential to JPS Composite Materials. This SDS and the information in it are not to be used for purposes other than compliance with the Federal OSHA Hazard Communication Standard. If you have received this SDS from any other source than JPS Composite Materials or its authorized agent, the information contained in it may have been modified from the original document and it may not be the most current revision.

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