

# Material Safety Data Sheet

JPS Composite Materials Corp. Astroquartz II & III Yarn

MSDS No. 231

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## Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** JPS Composite Materials Corp. Astroquartz II & III Yarn

**Finish Types:** QS 13

**Chemical Formula:** N/A

**CAS Number:** None

**Other Designations:** Quartz Yarn

**General Use:** Industrial

**Manufacturer:** JPS Composite Materials Corp., 101 Slater Road, P.O. Box 242, Slater, SC 29683, Phone 864-836-8011.

## Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
Filament Amorphous Fused Silica	60676-86-0	98.0 to 99.0%
Silane Coupling Agents	None	0.05 to 0.5%
Weaving Lubricants	None	Less than 0.50%

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Filament Amorphous Fused Silica	15 mg/cuM	N/E	10.0 mg/m <sup>3</sup>	N/E	3 Fiber/cc	N/E	N/E
Silane Coupling Agents	N/E	N/E	N/E	N/E	N/E	N/E	N/E
Weaving Lubricants	N/E	N/E	N/E	N/E	N/E	N/E	N/E

## Section 3 - Hazards Identification

### Emergency Overview

JPS Composite Materials Corp. coated and finished fabrics are stable under normal ambient conditions.

### Potential Health Effects

**Primary Entry Routes:** Inhalation

**Target Organs:** None

**Acute Effects**

**Inhalation:** Mechanical irritation of the mouth, nose and throat

**Eye:** Direct contact will cause mechanical irritation.

**Skin:** Transient mechanical irritation. Occasionally there might be skin irritation noted by individuals who are initially exposed to quartz fibers.

**Ingestion:** Observe individual. If symptoms of GI irritation develop, consult a physician.

**Carcinogenicity:** IARC, NTP, and OSHA do not list JPS Composite Materials Corp. quartz fabric as a carcinogen.

**Medical Conditions Aggravated by Long-term Exposure:** Skin, eyes and Respiratory Irritation.

**Chronic Effects:** None Known (See Section 11)

HMIS	
<b>H</b>	1
<b>F</b>	0
<b>R</b>	0
<b>PPE</b> <sup>††</sup> Sec. 8	

## Section 4 - First Aid Measures

**Inhalation:** Remove to fresh air; drink water to clear throat and blow nose to expel fibers.

**Eye Contact:** Flush with water for 15 minutes; get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water

**Ingestion:** Consult a physician if G.I. irritation exists.

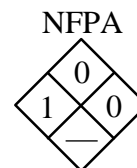
*After first aid, get appropriate in-plant, paramedic, or community medical support.*

**Note to Physicians:** None

Special Precautions/Procedures: None

## Section 5 - Fire-Fighting Measures

**Flash Point:** None  
**Flash Point Method:** N/A  
**Burning Rate:** None  
**Auto-ignition Temperature:** None  
**LEL:** None  
**UEL:** None



**Flammability Classification:** Non-flammable  
**Extinguishing Media:** Water is the best extinguishing media. Or use that which is appropriate for the surrounding area.  
**Unusual Fire or Explosion Hazards:** None  
**Hazardous Combustion Products:** Any sizing, binders or coatings on the quartz fabric might form hazardous decomposition products during a sustained fire. Follow fire-fighting procedures and use proper fire-fighting equipment.  
**Fire-Fighting Instructions:** Do not release runoff from fire control methods to sewers or waterways.  
**Fire-Fighting 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.

## Section 6 - Accidental Release Measures

**Spill /Leak Procedures:** Prevent the spread of quartz dust and avoid dust generation conditions. Vacuum clean dusts and fiber. If sweeping is necessary, use a dust suppressant. Those involved in the clean up of quartz fibers should use appropriate personal protective equipment. See Section 8.  
**Containment:** N/A  
**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## Section 7 - Handling and Storage

**Handling Precautions:** Handle properly to prevent the spread of quartz dust or fibers.  
**Storage Requirements:** Store in proper containers to prevent the spread of dusts and fibers. Low humidity levels will increase the spread of dusts and fibers.  
**Regulatory Requirements:** Keep airborne dusts and fiber concentrations below regulatory levels.

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** None  
**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne dust or fiber concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.  
**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.  
**Protective Clothing/Equipment:** If necessary wear protective gloves or use barrier cream to protect against any mechanical irritation. Eye protection is not required unless fiber levels might cause mechanical irritation of the eyes or local regulations require the use of eye protection. Goggles should then be used. Other protective clothing is not required.  
**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.  
**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. Wash hands after handling material.

## Section 9 - Physical and Chemical Properties

**Physical State:** Quartz Yarn  
**Appearance and Odor:** no discernible odor  
**Odor Threshold:** N/A  
**Vapor Pressure:** None  
**Vapor Density (Air=1):** N/A  
**Formula Weight:** None  
**Density:** N/A  
**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** N/A  
**pH:** 6-8 in distilled water.

**Water Solubility:** Not soluble  
**Other Solubilities:** N/A  
**Boiling Point:** N/A  
**Freezing/Melting Point:** 1650 Deg. C.  
**Viscosity:** N/A  
**Refractive Index:** N/A  
**Surface Tension:** N/A  
**% Volatile:** 0%  
**Evaporation Rate:** N/A

## Section 10 - Stability and Reactivity

**Stability:** JPS Composite Materials Corp. Astroquartz Yarn is stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization cannot occur.

**Chemical Incompatibilities:** None

**Conditions to Avoid:** None

**Hazardous Decomposition Products:** Thermal oxidative decomposition of JPS Composite Materials Corp. Astroquartz Yarn can produce small amounts of oxides of carbon, nitrogen, and silicone.

## Section 11- Toxicological Information

### Toxicity Data:\*

**Fiber Toxicity:** Quartz 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 Quartz continuous filaments 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 7<sup>th</sup> Annual Report on Carcinogens.

This would also apply to quartz filaments.

## Section 12 - Ecological Information

Quartz Yarn, cleaned or finished is considered to be an inert solid waste and will not cause harm to the environment if spilled or released. This product is not manufactured with, or does not contain and Ozone Depleting Chemicals.

## Section 13 - Disposal Considerations

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable federal, state, and local regulations.

**Disposal Regulatory Requirements:** N/A

**Container Cleaning and Disposal:** N/A

**Section 14 - Transport Information**

**DOT Transportation Data (49 CFR 172.101):**

<b>Shipping Name:</b> JPS Astroquartz II or III Yarn.	<b>Packaging Authorizations</b>	<b>Quantity Limitations</b>
<b>Shipping Symbols:</b> None	a) <b>Exceptions:</b> None	a) <b>Passenger, Aircraft, or Railcar:</b> None
<b>Hazard Class:</b> None	b) <b>Non-bulk Packaging:</b> None	b) <b>Cargo Aircraft Only:</b> None
<b>ID No.:</b> None	c) <b>Bulk Packaging:</b> None	
<b>Packing Group:</b> N/A		<b>Vessel Stowage Requirements</b>
<b>Label:</b> None		a) <b>Vessel Stowage:</b> None
<b>Special Provisions (172.102):</b> None		b) <b>Other:</b> None

**Section 15 - Regulatory Information**

**EPA Regulations:**

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)  
 RCRA Hazardous Waste Classification (40 CFR 261.): Not classified  
 CERCLA Hazardous Substance (40 CFR 302.4) listed/unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112  
 CERCLA Reportable Quantity (RQ): No RQ  
 SARA 311/312 Codes: N/A  
 SARA Toxic Chemical (40 CFR 372.65): Not listed  
 SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ): None

**OSHA Regulations:**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed  
 OSHA Specifically Regulated Substance (29CFR 1910.): No

**State Regulations:** None

**Section 16 - Other Information**

<b>Additional Hazard Rating Systems: NFPA Hazard Rating:</b>	<b>Health</b>	-	<b>1</b>
.....	<b>Flammability</b>	-	<b>0</b>
.....	<b>Reactivity</b>	-	<b>0</b>
.....	<b>Unusual Hazards</b>	-	<b>None</b>

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