

Material Safety Data Sheet

QUICK IDENTIFIER (In Plant Common Name)

OMNISIL

Manufacturer's Name Thermal Material Systems, Inc.

Emergency Telephone Number 1-775-359-6111

Address 506 E. Glendale Avenue
Sparks, NV 89431

Other Information Calls 1-800-523-3781

Signature of Person Responsible for Preparation Gary R. Teague

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SECTION 1 — IDENTITY

Common Name (used on label)
Trade Name & Synonyms OmniSil™ Silica Cloth

CAS No. 7631-86-9

Chemical Name Silicon Dioxide

Chemical Family Amorphous Silica

Formula SiO₂

SECTION 2 — HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common name(s))	%	Threshold Limit Value (units)
Amorphous Silica	> 99 %	ACGIH 10mg/m ³

There is not an established threshold limit value (TLV) that is directly applicable to the Omnisil woven silica fabrics.

Chemically, the Omnisil silica cloths are composed of about 99.5% amorphous silicon dioxide with trace elements of iron, sodium and magnesium. The Omnisil cloths are produced from continuous filament yarn with a medium filament diameter of 7.974 microns with a standard deviation of 1.349. The minimum filament size is 5.575 microns with the maximum size measured at 12.618 microns. The Omnisil filaments are considered non-respirable. The Omnisil cloths will partially transform to a cristobolite structure when subjected to steady state temperatures above 2,150°F. In the event that the Omnisil cloths are subjected to continuous temperatures exceeding 2,150°F, appropriate precautions should be exercised. (See Section 8)

SECTION 3 — PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point	Not Applicable (N/A)	Specific Gravity (H ₂ O=1)	2.1 g/cm ³	Vapor Pressure (mm Hg)	N/A
Percent Volatile by Volume (%)	N/A	Vapor Density (Air=1)	N/A	Evaporation Rate (=1)	N/A
Solubility in Water	N/A	Reactivity in Water	N/A		
Appearance and Odor	White when uncoated, Tan when coated with vermiculite. No odor.				
Flash Point	N/A	Flammable Limits in Air % by Volume	N/A	Lower N/A Upper N/A Extinguisher Media	N/A
Special Fire Fighting Procedures	N/A				
Unusual Fire and Explosion Hazards	N/A				

SECTION 4 — PHYSICAL HAZARDS

Stability	Stable. See "Incompatibility"
Incompatibility (Materials to Avoid)	OmniSil materials are not compatible with basic phosphates, hydrofluoric acid, some oxides and hydroxides, especially at elevated temperatures.
Hazardous Decomposition Products	Some forms of OmniSil may be treated with a vermiculite finish (see separate MSDS Z-01367).
Hazardous Polymerization	Will not occur.

SECTION 5 — HEALTH HAZARDS

Threshold Limit Value	ACGIH TLV is 10mg/m ³
Signs and Symptoms of Exposure	Some characteristics of OmniSil are similar to fiberglass which is identified as a nuisance particulate by ACGIH. Hypersensitive personnel may experience some irritation of the skin. If skin irritation
2. Chronic Overexposure	persists, wash with mild soap and water and seek medical attention.
Medical Conditions Generally Aggravated by Exposure	

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	NO	I.A.R.C. Monographs	NO	OSHA	NO
OSHA Permissible Exposure Limit	10 mg/m ³	ACGIH Threshold Limit Value	10 mg/m ³	Other Exposure Limit Used	10 mg/m ³	
Emergency and First Aid Procedures	OmniSil fibers are non-respirable. A respirable fiber is defined as one longer than 5 μ and less than 3 μ in width and with a length:width ratio of more than 3:1. OmniSil is a continuous filament, 6 μ fiber product.					
1. Inhalation						
2. Eyes	None usually required. If irritation occurs, flush with running water and seek medical attention.					
3. Skin	None usually required. If irritation occurs and persists, wash with soap and water and seek medical attention.					
4. Ingestion	None usually required. If ingestion occurs, consult a physician.					

SECTION 6 — SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type)		None Usually Required (NUR).							
Ventilation	YES	Local Exhaust	YES	Mechanical (General)	NUR	Special	N/A	Other	N/A
Protective Gloves	NUR				Eye Protection	NUR			
Other Protective Clothing or Equipment		NUR							

SECTION 7 — SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage	Store and use in a manner to minimize airborne particles.
Other Precautions	NUR
Steps to be Taken in Case Material is Released or Spilled	Avoid dust generating conditions. Collect by vacuum or wet methods.
Waste Disposal Methods	Dispose in accordance with local, state, and Federal regulations.