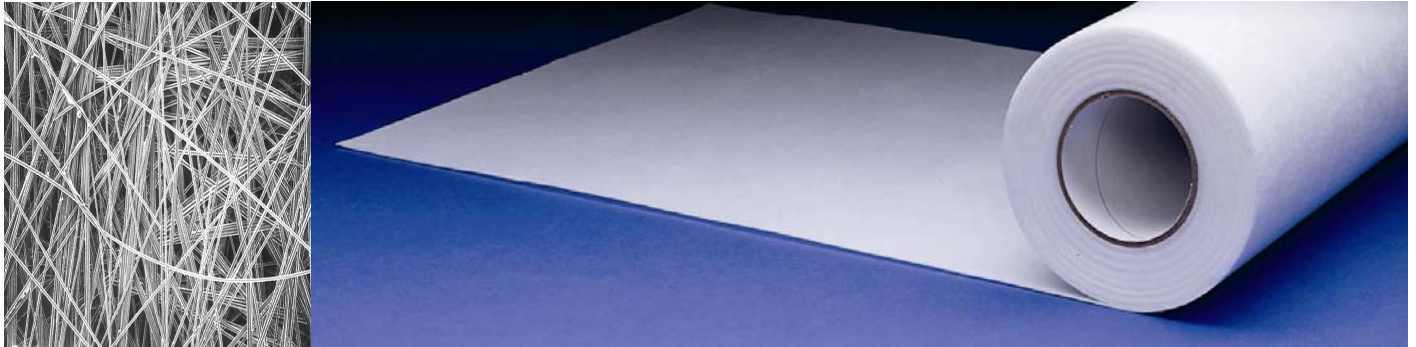


REFRASIL® SILICA FIBER PAPER (SFP)

High Temperature Paper Insulation



DESCRIPTION – REFRASIL® Silica Paper is a lightweight, high temperature, insulation composed of amorphous silica fiber. It has the following unique properties:

- Zero Shot Content
- Outstanding chemical resistance - especially acids
- Contains no asbestos or refractory ceramic fiber (RCF)
- Highly Resilient
- Higher Strength Insulating Material
- Non-respirable Fiber
- Electrically Insulating
- Less Abrasive to Die Cutting Tools

STANDARD SIZES

Thickness – 1/16", 1/8"
Roll widths – 12", 24", 36"

DENSITY

7-8 pcf
112-128 kg/m³

FIBER PROPERTIES

Fiber diameter: 6-13 microns
Fiber length: 0.25 – 0.5" avg. (6-12 mm)

LOI

-Moisture ~10%
-Binder 5%

MAXIMUM RECOMMENDED USE TEMPERATURE

For intermittent use: 2200° F (1200° C)
For continuous use: 1800° F (980° C)
Melting point: 2900° F (1593° C)

TENSILE STRENGTH (T.A.P.P.I. 494)

Thickness	Direction	
	Machine	Cross
Nominal	g/in	g/in
1/16"	8500	3700
1/8"	12000	5300

CHEMICAL ANALYSIS

Silica (SiO₂) - > 93.5% min
Alumina (Al₂O₃) - 4.0%
Others - < 1.0%

THERMAL CONDUCTIVITY

Temperature	Btu·in/hr ft ² ·°F	W/mK
400°F (200 °C)	0.30	0.043
750 °F (400 °C)	0.46	0.066
1100 °F (600 °C)	0.70	0.101
1500 °F (820 °C)	0.94	0.135
1800 °F (980 °C)	1.05	0.151

PERMANENT LINEAR CHANGE (ASTM C356)

	% shrinkage
24 hrs at 1000 °F (540° C)	3.90%
24 hrs at 1400 °F (760° C)	5.00%
24 hrs at 1800 °F (980° C)	5.33%



HITCO CARBON COMPOSITES, INC.

The test data shown are based on average results on production samples and are subject to normal variation on individual tests. Therefore, the above listed data should not be taken as established maximum or minimum specifications. For technical support or specific application information, contact the HITCO Carbon Composites Materials & Fabrication Department at (800) 421-5444, or visit our website at www.hitco.com

1600 West 135th • Gardena, CA 90249
www.hitco.com or www.refrasil.com
e-mail: refrasil@hitco.com
Tel: 800.421.5444 • 310.527.0700
Fax: 310.515.1779