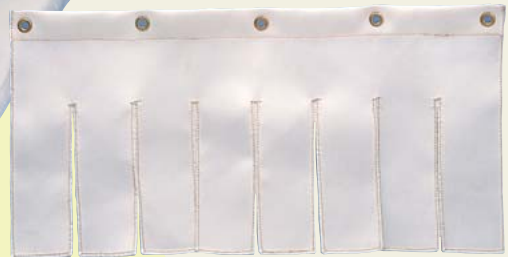


Ultra-High Heat Resistant Material

SILIGLASS®



Courtesy of JAXA



Courtesy of JAXA

SILIGLASS® High Temperature Textiles are composed of silica fibers and specifically designed to replace asbestos in a variety of high heat applications.

The various forms of the SILIGLASS® textile group have excellent thermal insulation characteristics over a wide temperature range and can not be melted until temperatures exceed 1,700°C.

Moreover, with its excellent resistance to thermal

shock, chemical stability and electrical resistivity, SILIGLASS® has been used increasingly in many branches of industry.

All SILIGLASS® textile forms (cloth, tape, sleeving, rope, yarn and wool) have the same basic chemical, physical and mechanical features.

Characteristics

■ Asbestos Free

■ Fireproof

Capability of operating at 1,000°C continuously.

■ Resists Thermal Shock

■ Resists Chemicals

Good Stability against all chemicals except for hydrofluoric acid, caustic soda, causticpotash, etc.

■ Electrical Resistivity

■ Minimal Shrinkage

■ Resists Molten Steel

■ Non – Hazardous

■ Cost Effective

■ Good Workability

Applications

■ High temperature thermal insulation and absorption material

Welding & Burning Protection Drop Cloth, Welding Curtains, Furnace Curtain, Heat Treat & Stress Relief Insulation

■ High temperature filter media

Filter media for hot gases and chemicals.

■ High temperature structural materials

Rocket nose cones, etc.

■ Wicks of oil heater

■ Catalytic carrier for oxidation – reduction reaction

Catalytic carrier of deodorization equipment. Treating material for organic solution gas.

■ Others

Electric cable insulator for hair driers. High temperature buffers and seals.

Chemical Compositions

SILIGLASS® High Temperature Textiles are manufactured through a chemical leaching of glass fibers, resulting in almost pure silica (SiO₂).

Composition	Measured Value	Composition	Measured Value
SiO ₂	98.92%	MgO	0.01%
Al ₂ O ₃	0.44	Na ₂ O	0.02
CaO	0.07	K ₂ O	0.01
Fe ₂ O ₃	0.01	TiO ₂	0.36

Cloth

SILGLASS® cloths are very flexible with excellent drapability and offer a wide versatility of use in general industry.

These materials have the capability of operating at 1,000°C continuously.

Especially, the new U and AD types, exhibiting tensile strength and abrasion resistance even greater than conventional silica fiber.

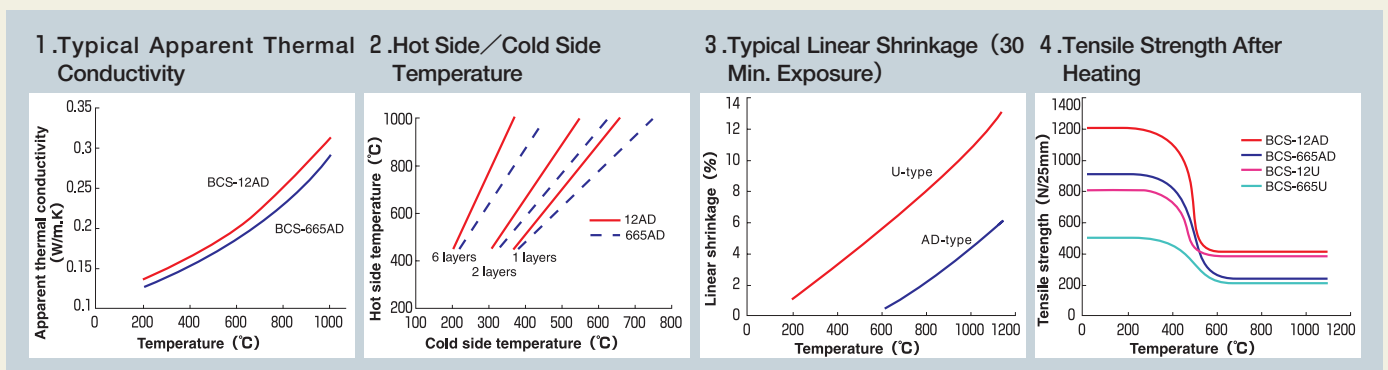


Standard Specifications

Product Code	Thickness (mm)	Width (mm)	Length (m)	Weight (g/m ²)	Product Tensile Strength (N/25mm)		Tensile Strength After Heating (N/25mm)		Heat Shrinkage (%)	Weave
					Warp	Weft	Warp	Weft		
BCM-430	0.40	525	100	270	>78	>78	>29	>29	<5.0	Mock Lemo
BCA-650	0.60	1,000	50	460	>196	>127	>137	>88	<7.0	Twill
BCS-665	0.62	1,000	87	630	>294	>137	>196	>98	<4.5	Satin
BCS-665AD	0.65	1,000	50	570	>490	>294	>196	>98	<7.0	Satin
BCS-665U	0.60	1,000	50	570	>343	>196	>196	>98	<15.0	Satin
BCS-12	1.20	1,000	50	1,190	>392	>245	>343	>196	<7.0	Satin
BCS-12U	1.20	1,000	50	1,070	>735	>490	>343	>196	<15.0	Satin
BCS-12AD	1.25	1,000	500	1,190	>882	>637	>343	>196	<7.0	Satin

- Heat shrinkage : Percentage of length reduction with 1100°C applied for 30 minutes. (BCS-665 is with 1200°C applied for 30 minutes)
- Tensile strength after heating : Retention of tensile strength after 30 minutes heating at 1100°C. (BCS-665 is after 30 minutes heating at 1200°C)
- BCS-665U,BCS-665AD,BCS-12U and BCS-12 are JIS A 1323 (flame resisting examination) passing goods.

Typical Characteristics



Tape, Sleaving, Rope, Yarn

Like SILIGLASS® cloths, these products are ideal for use in extremely high temperature applications where conventional fiberglass and products would fail.



Standard Specifications

■ Tape

Product Code	Thickness (mm)	Width (mm)	Length (m)	Product Tensile Strength (N/25mm)	Tensile Strength After Heating (N/25mm)	Heat Shrinkage (%)	Weave
BTH-225	0.20	25	80	>78	>59	<7.0	Plain
BTA-425	0.35	25	50	>137	>98	<7.0	Twill
BTA-450	0.35	50	50	>137	>98	<7.0	Twill
BTA-625	0.60	25	50	>196	>137	<7.0	Twill
BTA-650	0.60	50	50	>196	>137	<7.0	Twill
BTN-1550U	1.50	50	50	>196/width	>137/width	<15.0	Warp Backed

■ Sleaving

Product Code	Standard Inner Diameter (mm φ)	Pitch (Per 25mm)	Length (m)	Heat Shrinkage (%)
BS-1	1	18	30	<7.0
BS-2	2	17	30	<7.0
BS-3	3	15	30	<7.0
BS-5	5	15	30	<7.0
BS-8	8	17	30	<7.0
BS-20	20	13	30	<7.0

■ Rope

Product Code	Standard Inner Diameter (mm φ)	Standard Length (m)	Heat Shrinkage (%)	Braid
BRA-25U	25	20	<15	Entwinement

■ Yarn

Product Code	Count (g/km)	Product Tensile Strength (N/yarn)	Tensile Strength After Heating (N/yarn)	Heat Shrinkage (%)
BY-850	850	>78	>19.6	<7.0

Heat shrinkage : Percentage of length reduction with 1100°C applied for 30 minutes.

Tensile strength after heating : Retention of tensile strength after 30 minutes heating at 1100°C.

This catalog is subject to change without any notice.

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