

FIBERFRAX[®] CLOTH, TAPE & SLEEVING

Fiberfrax textile product forms are durable, high temperature ceramic fiber fabrics that are well suited for industrial applications requiring strong, yet flexible, high temperature-resistant materials. They are noted for their superior insulating ability to 1260°C.

All textiles contain approximately 20% organic fiber added during the carding process to produce roving. The roving is further processed into yarn for weaving into Fiberfrax cloth, tape and sleeving.

Insert materials are incorporated into the Fiberfrax cloth, tape and sleeving to increase tensile strength. Alloy wire inserts are available for obtaining maximum strength at elevated temperatures. Glass filament inserts are used in applications where metal is undesirable as is the case when Fiberfrax textiles are used as a dielectric. The following insert materials are available:

- Glass filament: service to 650°C (L-126)
- Inconel wire: service to 1093°C (L-144)

Chemical Properties

Fiberfrax cloth, tape and sleeving have excellent resistance to thermal shock, corrosive attack and breakdown due to mechanical vibration and stress. They also have excellent resistance chemical stability resisting attack from most corrosive agents. Exceptions are hydrofluoric and phosphoric acids, and concentrated alkalis. Rope and Square Braid also resist oxidation and reduction. If wet by water or steam, thermal and physical properties are completely restored on drying. No water of hydration is present.

Typical Product Parameters

Temperature Grade	1260°C
Recommended Operating Temperature	1260°C
Melting Point	1790°C



Typical Applications

- Gasket and wrapping material
- Induction heating furnace coil insulation
- Cable and wire insulation (thermal and/or electrical)
- Infrared radiating diffusers
- Boiler tadpole gaskets
- Furnace heat zone separators
- High pressure steam portable flange covers
- Welding curtains and blankets
- Exhaust hood curtains
- Pipe hanger insulation

Non-Standard Product Forms

The following product variations are available as non-standard textile products. Please contact your Unifrax Application Engineer at +61 3 9463 0058 for additional information.

Product Variation:	Description:
Heat Treatment (T)	3% Organics
Double Heat Treatment (TT)	0% Organics
Double Thickness (DL-126, DL-144)	Nominal 4.8mm
Ladder Tape (Bolt Hole, Drop Warp)	Centre Yarns omitted
Tadpole Gaskets	Rope core, tape covering
Fabricated Curtains	Utilising cloth, grommets
Custom Sizes	Special lengths, widths

Typical Physical Properties

Fiberfrax Cloth

	L-126	L-144
Standard Width	914mm	914mm
Nominal Thickness	3.2mm	3.2mm
Insert Material	Glass	Inconel
Temperature Limit of Insert	649°C	1093°C
Weight	1.3 kg/m	1.3 kg/m

Fiberfrax Tape

	L-126	L-144
Standard Widths	25, 51, 76mm	13, 25, 51, 76, 152mm
Nominal Thickness	3.2mm	3.2mm
Insert Material	Glass	Inconel
Temperature Limit of Insert	649°C	1093°C

Fiberfrax Sleeving

	HP-126	HP-144
Standard Widths (I.D.)	25, 38, 76mm	13, 19, 25, 38, 51, 63, 76, 102mm
Nominal Thickness	3.2mm	3.2mm
Insert Material	Glass	Inconel
Temperature Limit of Insert	649°C	1093°C