

Product Categories

Pure Flexible Graphite Fluid Sealing Products

Injectable Pump & Valve Seal

Pure Expanded Teflon Fluid Sealing Products

High Performance Mechanical Sealants

Filled Teflon Gasket Sheet Products

High Temperature Insulation Products

Compressed Fiber Gasket Sheet Products

Viton^(r) Fluoroelastomers Sealants
(High Performance)

Pure Teflon & Filled Teflon Products

Unasco
(Anti-Seize & Gas Sealing)

Metallic Gasket Products
(High Performance)

Packings - Mechanical
(Compressed Braided Fiber Products)

New Products

FIBRE GLASS TEXTILE PRODUCTS INFORMATION



A FULL LINE OF ASBESTOS-FREE INSULATION PRODUCTS

- Fabrications
- Fabrics Cloth and Tapes
- Fibre Ropes
- Twisted Ropes Packing
- Braided Ropes Packing
- Curtains, Fire Blankets
- Protective Clothing
- Castings
- Linings
- Flange Jointings
- Heat Shields
- Door Seals
- Tapole Packings
- Tubings
- Manhole Seals
- Mill Boards
- Sleeves
- Gloves
- Sewing Threads



A FULL LINE OF ASBESTOS-FREE INSULATION PRODUCTS

Texturized Materials

E - Glass	550°C
Kerasil	750°C
Ecomab	1050°C
Keramab	1260°C
Reflex	1370°C

TECHNICAL DATA

E-Glass products are made from yarns that are a highly texturized form of Silica. Thermodynamics fabrics with our proprietary, one-side treatment provide :

- *Excellent cutting, sewing and handling
- * Heat properties: 600°C (1112°F)
- *High temperature capability
- *Cold Properties: -73°C (-100°F)
- *Outstanding abrasion resistance
- * Chemical Resistance: common acids, alkalize and solvents.
- *Molten metal splash protection
- *Roll length, weight and thickness tolerance: -10% to +10%
- * Electrical/Filtration: Non-conducting and high characteristics provide excellent electrical insulating properties. Its air permeability, chemical and abrasion resistance made it a good filtration medium.

FIBRE GLASS TEXTILE PRODUCTS INFORMATION

Technical Data (continued...)

- *Listed by Underwriters Laboratories UL 214
- *UL 723 Flame Spread: 0 Smoke density: 0 Fuel Contributed: 0
- *U.S. Military Spec. MIL-C-0020079H, MIL-1-24244C
- *U.S. Coast Guard Spec. No. 164.009
- * Specific Gravity : 2.54
- *Meets or exceeds NFPA Spec. No. 701
- * Moisture Absorbency (surface)0.3%
- *Thermal Conductivity 1.05Kj/KgK* Moisture Regain : none
- *Tensile Strength : @72OF 500,000psi@7000F 380,000psi @1000'F 250,000psi
- *Hysteresis : none
- * Creep : none
- *Elongation at Break: 4.8%
- * Elastic Recovery: 100%

CHEMICAL ANALYSIS OF GLASS FIBRE PRODUCTS

SiO	54.5%	CaO	17.0%
AlO	14.5%	MgO	4.5%
FeO	0.5%	Others	1.5%
BO	7.5%		

All Thermodynamics textiles are available in many sizes and with treatments other than those listed in this catalogue. While we have attempted to represent most of our products, we realize you may require a special size rope, a special width of fabric or tape, or a special coating. If you do not see a product listed to meet your needs, please call us with your special requirements and we will engineer a product that does. Challenge us!

The applications for Thermodynamics Textiles are many : from steel mills to oil refineries, chemical processing plants, power plants, wherever the need exists for a high-temperature resistant textile product.

Service is Thermodynamics edge in the world of high-temperature textile manufacturers. We're large enough to handle big volume orders, while being flexible enough to make a short run to facilitate your small special order needs. We'll even work with you in designing a product to meet those unique requirements.

**THERMODY, THE SAFE-TO-USE PRODUCT FOR
HIGH-TEMPERATURE APPLICATIONS
SPECIFY FOR US TODAY!**





Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Style TD4910



WOVEN GLASS FIBRE CLOTH

Dimensions: Width 1000mm standard 1500mm on request

Length 50 meters standard per roll

Thickness 0.4mm to 3.2mm

Weight: 300g/m² to 2200g/m² depending on its thickness

Weave: plain

Fabric cloth are available also in Heat Treated tan color finish
Applications: Welding cloths, protective clothing, finishing of insulation.

Available also in Silicone Rubber coating, Neoprene Rubber coating, Stainless Steel Wire reinforced for added strength, Aluminum Foil and Aluminized laminated fabrics.



Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Style TD3600 & TD3700



WOVEN GLASS FIBRE TAPES

TD 3600 Plain Woven Tapes and TD 3700 Bolt Hole Tapes are also available in Heat Treated tan color finish, Pressure adhesive backing on one side and Stainless Steel wire reinforced.

Dimensions: Width 10mm to 150mm

Thickness 0.8mm to 6.0mm

Length 30 meters per roll

Weight: 40g/m² to 380g/m² depending on its thickness

Applications: Wrapping steam tracer lines, hose, piping, tadpole tapes, gasketing, curtains for ovens, bolt hole tap to place over bolts.



Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Style TD3200 Round, TD 3210 Square



BRAIDED GLASS FIBRE ROPES

Supplied in round, square and rectangular section.
Interlock braided constructions (1/8" and 3/16" plaited)
Rope can be impregnated with PTFE, graphite etc. and
stainless steel or inconel wire reinforced on request.

Diameters: 5 - 8mm	200M/roll	30mm	25M/roll
10 - 15mm	100M/roll	40mm	20M/roll
20 - 25mm	50M/roll	50mm	10M/roll

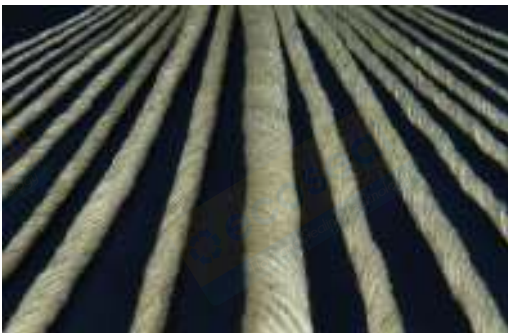
Applications : Static door seals for boilers, ovens, furnaces,
kiln cars, heat exchanger, filter elements, wrapping exhaust.



Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Style TD3100



TWISTED GLASS FIBRE ROPE

Twisted rope is produced from a number of single yarn
twisted together. The diameter of the rope is determined
by the number and thickness of the yarn being used.
Rope can be reinforced with stainless steel or inconel
wire on request.

Diameters: 3 - 4mm	200M/roll	30mm	25M/roll
5 - 12mm	100M/roll	40mm	20M/roll
15 - 25mm	50M/roll	50mm	10M/roll

Applications : Stove door seals, ovens, coke furnaces,
thermal insulation of electrical wiring, wrapping round
pipes.



Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Style TD3300



KNITTED GLASS FIBRE ROPE

Style TD3300 is a very flexible, soft, easily compressible material mainly used by cast iron stove producers.

The flexibility is necessary because of the coarse surface of cast iron products.

Diameters : 5 - 12m 100M/roll

Other applications : gasketing, caulking of oven and furnace doors, including wood stoves and expansion joints.



Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Style TD3800



BRAIDED GLASS FIBRE SLEEVE/TUBING

1.5mm and 3.0mm wall thickness is standard.

Inner Diameters : 10 - 50mm 25M/roll

Applications : Cable and wire insulation's, hose covering, protection for hydraulic and electrical cables, gasketing, thermal insulation, cover tubes and pipes, cables and flexibles can also be overbraided immediately in our factory. Sleeves can also be coated with Silicone or other Rubber.



Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Style TD3900



Bulb Diameter: 9.5mm to 25.4mm
Overall width : 25.4mm to 65mm

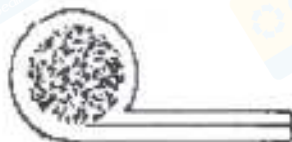
GLASS FIBRE SPECIAL TADPOLE TAPES

Custom manufactures a variety of special tadpole tapes to meet varied service conditions. Tadpole tapes are resilient , non-absorbent, gasketing tapes formed by wrapping heat resistant cores with specially treated cover materials. Edges are stitched or cemented together forming the tail structure. Provide effective sealing on light metal flanges or where limited bolting force is available. Because of their softness and conformability they are especially suited for applications where closures rest on the packing bulb. Available in conventional construction for steam service with core materials of inconel or stainless steel mesh cable; glass fiber jackets with coatings of neoprene, silicone, or with impregnation of Teflon.

Typical Construction Styles



Conventional-Radial tail



Tangential tail



Round-no tail



Double tangential tail



Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Style TD3905



GLASS FIBRE TACKY GASKET CLOTH

Manufactured from 100% E-Glass yarns and brass wire then coated with S.B.R. or natural rubber. Used in the manufacture of boiler gaskets, folded tape, tadpole tape and luting. Brass wire prevents gaskets from dishing; gives more stability to the product.

Available in 1.5mm to 6.0mm thickness x 1 M wide;
Tacky, dusted both sides, graphited, and red and black.

For operating temperatures to 2900C against steam, air, water



Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Style TD3908



GLASS FIBRE TACKY GASKETS

Manufactured using Style TD3905 Tacky gasket cloth which offer the following advantages:

Fold gaskets made from this material do not 'dish' they lay flat and hold their shape better than previous asbestos.

Base cloth is heavier and thicker than other products.

Base cloth is made from 100% glass fiber yarn with wire.

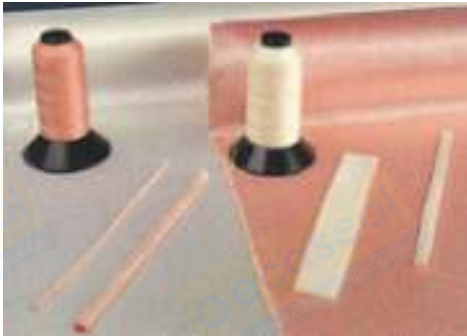
For operating temperatures to 2900C against steam, air, water and gases.



Category: High Temperature Textile Insulation Products

Group: Fibre Glass Textile

Model: Glass Fibre Engineered Yarns



GLASS FIBRE ENGINEERED YARNS

Threaded from 100% E-Glass raw material and available with wire reinforced and or Teflon coated. Yarns can also be heat treated textured in tan color.

To be used as sewing thread for cloth, tapes and other.

Style 1.75cut yield 175yds/Lb

Style 8-cut with two SS304 wires .0045" dia. (800yds/Lb)

N 1 8-PTFE Coated glass fiber sewing thread (2150yds/Lb)

N24-PTFE Coated glass fiber sewing thread (1600yds/Lb)



Category: High Temperature Textile Insulation Products

Group: Ceramic Fibre Textile

Model: TD6992 & TD6993



WOVEN CERAMIC FIBRE CLOTH

This cloth is available either with glass wire yarn reinforced or inconel wire reinforced and has been treated for dust control.

STYLE TD6992 Glass wire reinforced Temp - 650°C

STYLE TD6993 Inconel wire reinforced Temp - 1100°C

Dimensions: Width 1000mm
Thickness 2.0mm to 6.0mm
Length 25Mtrs or 30Mtrs rolls

Applications: Protective clothing, controlled cooling down of casting, finishing of insulation, furnaces, Boilers, welding blankets, etc. We can fabricate all desired dimensions or shape. Rubber, aluminium or Graphite coating are on demand.



Category: High Temperature Textile Insulation Products

Group: Ceramic Fibre Textile

Model: Style TD5120, TD5130, TD5121, TD5122



CERAMIC FIBRE TWISTED ROPE--ROUND

STYLE TD5120 Glass wire reinforced

STYLE TD5130 Inconel wire reinforced

STYLE TD5121 Brass wire overbraided

STYLE TD5122 Glass wire overbraided

Diameters: 3- 4mm	200Mtrs/roll	30mm	25Mtrs/roll
5-12mm	100Mtrs/roll	40mm	20Mtrs/roll
15-25mm	50Mtrs/roll	50mm	10Mtrs/roll

Applications: Cover joints, joints for stovedoors, insulation of pipes etc....



Category: High Temperature Textile Insulation Products

Group: Ceramic Fibre Textile

Model: Style TD5202, TD5203, TD5212, TD5213



CERAMIC FIBRE BRAIDED PACKING

STYLE TD5202 Round braided Glass wire reinforced

STYLE TD5203 Round braided Inconel wire reinforced

STYLE TD5212 Square braided Glass wire reinforced

STYLE TD5213 Square braided Inconel wire reinforced

Diameters: 5- 8mm 100Mtrs/roll 20-25mm 30Mtrs/roll

10-1 5mm 50Mtrs/roll 30-80mm 10Mtrs/roll

Applications: Static seal for boilers, industrial furnaces, coke oven doors etc....



Category: High Temperature Textile Insulation Products

Group: Ceramic Fibre Textile

Model: Style TD5432, TD5453, TD5434, TD5456



CERAMIC SEALING ROPE--100% CERAMIC FIBRES

STYLE TD5432 Glass overbraided, large meshes

STYLE TD5453 Inconel overbraided, large meshes

STYLE TD5434 Glass overbraided, close meshes

STYLE TD5456 Inconel overbraided, close meshes

Diameters: 12-60mm 25Mtrs/roll

Applications: Insulation of pipes, Kiln-car joints, expansion/fire joints in civil buildings (with certificate), coke ovens doors.



Category: High Temperature Textile Insulation Products

Group: Ceramic Fibre Textile

Model: Style TD5620, TD5630, TD5720, TD5730



CERAMIC FIBRE WOVEN TAPES

STYLE TD5620 Glass wire reinforced woven Tapes
STYLE TD5630 Inconel wire reinforced woven Tapes
STYLE TD5720 Glass wire reinforced Bolt-hole Tapes
STYL TD5730 Inconel wire reinforced Bolt-hole Tapes

Diameters: Width	10-150mm
Thickness	2-5mm
Length	25 Metres/roll

Applications: Between steel profiles of ovens, winding around pipes, Bolt-hole Tapes to place over bolts.



Category: High Temperature Textile Insulation Products

Group: Ceramic Fibre Textile

Model: Style TD5820, TD5830



CERAMIC FIBRE BRAIDED SLEEVE

STYLE TD5820 Glass wire reinforced
STYLE TD5830 Inconel wire reinforced

Inner Diameters: 8 - 60mm 25 Mtrs/roll

Applications: To cover tubes and pipes, with electrical wires always use the glass reinforced type, cables or flexibles can also be overbraided immediately in the factory.



Category: High Temperature Textile Insulation Products

Group: Ceramic Fibre Textile

Model: Style TD5920, TD5930



CERAMIC FIBRE TADPOLE TAPES

STYLE TD5920 Glass wire reinforced

STYLE TD5930 Inconel wire reinforced

Dimensions: Custom Sizes

Applications; sealing from ovens, can be in hard or soft cersion according to applications



Category: High Temperature Textile Insulation Products

Group: Ceramic Fibre Textile

Model: Style TD6320, TD6330, TD6350



MANHOLE SEALS

STYLE TD6320 In Ceramic or Glass Fibre

STYLE TD6330 In Glass, Brass or Inconel reinforced

STYLE TD6350 In Rubber and/or Graphite coating

Dimensions: All used dimensions available

Applications: Seals for manhole covers in boilers.



Category: High Temperature Textile Insulation Products

Group: Ceramic Fibre Textile

Model: Style TD7320, TD7330, TD7350



GLOVES

STYLE TD7320 In Ceramic fibre

STYLE TD7330 In Glass fibre

STYLE TD7350 In Kevlar fibre

Dimension: Available in several different shapes, long, short, and with five fingers or fingerless.

Applications: Foundry, welding gloves, ceramic industry, laboratory, steel mills etc....