

REFRASIL[®] rope gaskets and sleeveings



Rope gasket sealing material for temperatures up to 982 °C [1800 °F].

REFRASIL rope gasket is a dimensionally controlled, high-density, braided, high-silica [96 % SiO₂] product intended for service temperatures up to 982 °C [1800 °F]. Produced in five sizes – 6.4 mm [0.25"] through 25.4 mm [1"] diameter REFRASIL rope gasket is braided from texturized yarns, pre-shrunk, and treated with a hydrocarbon finish to improve its abrasion resistance and ease of handling.

Availability

REFRASIL's textiles are available in a variety of product forms to suit each customer's specific needs: cloth, tape, sleeving rope, yarn, cordage, batt, and bulk fiber.

All textiles can be purchased through a nationwide network of stocking distributors.

Packaging

REFRASIL RG-1/4, RG-3/8 and RG-1/2 are packaged as 30 m [100 lineal feet] spools, two spools to a carton. RG-3/4 and RG-1 are packaged as 15 m [50 lineal feet] spools, two spools to a carton.

Material data of REFRASIL[®] rope gaskets

Typical properties	Units	RG-1/4	RG-3/8	RG-1/2	RG-3/4	RG-1
Nominal diameter	mm/in	5.8/0.23	8.4/0.33	11.9/0.47	18.5/0.73	24.4/0.96
Density	kg/m ³ /lbs/cu/ft	705/44	721/45	497/31	497/31	577/36
Yield	m/kg/ft/lb	55/82	26/38	16/24	7/11	4/6
Breaking strength ambient temperature	kg/lb	18/40	27/60	64/140	113/250	213/470
Shrinkage at 871°C [1600 °F]	%	0.60	0.60	0.60	0.70	0.80

Typical applications

REFRASIL rope gaskets can be used where compact, dense, high-temperature performance compressive seals are required, e. g., partial grooves in furnace or oven doors where the rope is not entirely contained. It also is used as a sealing element in many types of manufacturing equipment which handle heat, such as furnaces, boilers and ovens.

In small-diameter high-temperature gasketing applications, REFRASIL rope gasket is an excellent alternative to asbestos and ceramic fiber-braided ropes and wicks.

REFRASIL asbestos-free textiles are designed to perform continuously to 982 °C (1800 °F)

REFRASIL industrial insulation textiles are high purity silica products with the high-performance capabilities of a refractory material. They provide insulation and protection in continuous environments to 982 °C (1800 °F), retaining their original textile characteristics. REFRASIL is relatively inert and resists most chemical attack.

With REFRASIL textiles, maintenance time, labor, and energy costs can be reduced. Parts, materials, equipment, personnel, and machinery can be protected from potential damage and destruction caused by molten metal splash, sparks, and radiant heat.

REFRASIL sleeveings do not lose strength and remains flexible to 982 °C (1800 °F)

REFRASIL braided sleeveings are the solution for an efficient, low maintenance thermal insulation. Absolutely fireproof, it is also resistant to oxidation and most corrosive solutions and does not degrade in the presence of water.

REFRASIL sleeveings are available as standard or heavy wall. The looser braid of standard sleeving can accommodate a large variety of diameters. Heavy wall sleeveings have a very tight and thicker braid for maximum thermal protection.

Packaging

REFRASIL sleeving products are typically packaged as 15 m (50 lineal feet) spools.

Material data of REFRASIL® sleeveings

Typical properties	Units	Standard nominal wall thickness – 8.81 mm (0.032 in)					Heavy nominal wall thickness – 1.65 mm (0.065 in)			
		UB-3/4	UB-1	UB-1-1/2	UB-2	UB-2-1/2	UB-2-1/2	HWS-1/2	HWS-1	HWS-1-1/2
Nominal I.D.	mm/in	19.1/0.75	25.4/1	38.1/1.5	50.8/2	63.5/2.5	9.7/0.38	12.7/0.5	25.4/1	38.1/1.5
Maximum I.D.	mm/in	24.1/0.95	34.3/1.35	63.5/2.50	81.3/3.20	83.8/3.30	0.1/0.040	0.1/0.040	27.9/1.10	40.6/1.60

