

# **Kaowool Rope and Textiles**



### **DESCRIPTION**

Kaowool textiles are completely asbestos free and possess all the high temperature and superior properties of Kaowool fibres.

Ceramic fibres are carded with a blend of organic fibres to form rovings. A reinforcement of glass filament of inconel wire is then introduced and the combination spun to produce the yarns that are the basis of the Kaowool textile range.

Yarns and textiles are suitable for a wide range of high temperature sealing and insulating applications. In applications where tensile strength is important, textiles manufactured from a glass filament reinforced yarn many be used up to 550°C. Textiles manufactured from inconel reinforced yarn may be used up to 1100°C. Where tensile strength is not important, yarns and textiles may be used up to 1260°C.

# TYPE

Textiles made from high temperature insulation wool.

## **CLASSIFICATION TEMPERATURE**

Alumino-Silicate: 1260°C

Glass Filament: 550°C Inconel Wire: 1100°C

The maximum continuous use temperature depends on the application. In case of doubt, refer to your local Morgan Thermal Ceramics distributor for advice.

### **TYPES AVAILABLE**

#### Yarn

Yarn is manufactured from ceramic fibre. This yarn is the base of all the Kaowool textile range of products. The yarn is reinforced with either a glass filament or a fine inconel wire.

#### Cloth

Kaowool cloth is woven from a glass or inconel wire reinforced ceramic fibre yarn.

# · Cabled rope (high density)

Kaowool high density cabled rope is manufactured from ceramic fibre yarn which is either glass filament or inconel wire reinforced. It is composed of 3 pretwisted strands each containing a predetermined multiple of ceramic fibre yarns which are twisted together to form a flexible, high density rope.

# · Cabled rope (low density)

Kaowool low density cabled rope is manufactured from Kaowool roving which is glass filament reinforced. It is composed of 3 pre-twisted strands each containing a predetermined multiple of Kaowool yarns which are twisted together to form a flexible, low density rope.

# · Rope lagging

Kaowool rope lagging consists of a strip of ceramic fibre blanket that is overbraided with a glass yarn. This produces a highly insulating rope product of medium density, which is also compressible and flexible. As an alternative, this product could also be overbraided with either a cotton yarn or a fine inconel wire.

## · Twisted rope

Kaowool twisted rope consists of a multiple of ceramic fibre yarn strands which can be either glass filament or inconel wire reinforced. They are twisted together to give the required final product diameter. This gives a soft rope product that is relatively easily compressed and is particularly suitable as a seal between uneven surfaces.

# Webbing

Kaowool webbing is woven from either glass or Inconel wire reinforced ceramic fibre yarn.

# Ladder tape

Kaowool ladder tape is woven from either glass or inconel wire reinforced ceramic fibre yarn. It has a similar weave to cloth on the outer edges, but an open weave in the centre allowing for ease of installation over studs. It is ideal as a gasketing material.

MSDS Code: 104-9-EURO REACH



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Availability:

Section (mm)	Twisted Rope	Cabled Rope (high density)	Cabled Rope (Low Density)	Rope Lagging
4	200			
6	100	100		
9	50	50	50	25
12	50	50	50	
13				25
15	50	50	50	25
19				25
20	25	25	25	
25		25	25	25
30		25	25	
38				
40		20	20	
50		20	20	25
75				25

Webbing			
Width (mm*)	Thickness (3mm)		
25	25		
40	25		
50	25		
75	25		
100	25		

Ladder Tape			
Width (mm*)	Roll Length (m)		
25	25		
40	25		
50	25		
75	25		
100	25		

Yarn is available in lengths of approx. 650-700m (spool weight 1kg).

Cloth is available in lengths of 10 and 25m (width 1m)

 $({}^\star) \ \text{other diameters, widths \& thicknesses available upon request (subject to minimum order requirements)}.$ 

The values given herein are typical values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Therefore, the data contained herein should not be used for specification purposes. Check with your Thermal Ceramics office to obtain current information.