BIO-SOLUBLE FIBER BLANKET · BRAND: BIOWOOL®

Bio-Soluble Fiber Blanket

Needled soluble fiber blanket – 1100 °C and 1300 °C grades

Product Overview

BIOWOOL® Blanket is a high-strength, needled insulating blanket made from BIOWOOL® bulk fiber. Spinning and needling produce a tough, resilient blanket with very good thermal and mechanical properties.

It is used in a wide range of applications including thermal insulation and appliances, and can be folded, compressed and encapsulated to make modules. It can meet the requirements of European Regulation (EC) No 1272/2008.



Key Features

- Excellent thermal shock resistance
- Excellent thermal stability
- High tensile strength
- Low thermal conductivity
- Low heat storage

Typical Applications

- Pipe wrap
- Furnace and kiln back-up insulation
- Annealing furnace linings
- Appliance insulation
- Expansion joint seals

Technical Data

Grade	1100 Blanket			1300 Blanket	
Classification Temperature (°C)	1100			1300	
Chemical Composition (%)					
SiO_2	62 – 68			≥ 70	
CaO	26 – 32			–	
MgO	4 – 7			–	
CaO + MgO	–			≥ 20	
Colour	White			White	
Shot Content (%)	≤ 12			≤ 12	
Density (kg/m³)	64	96	128	96	128
Tensile Strength (kPa)	30	50	70	50	70
Permanent Linear Shrinkage (%), 24 h	≤ 1.0 at 1100 °C			≤ 3.0 at 1260 °C	
Thermal Conductivity (W/m·K)					
200 °C	0.06	0.05	0.05	0.05	0.04
400 °C	0.11	0.09	0.08	0.10	0.08
600 °C	0.17	0.13	0.12	0.18	0.14
800 °C	0.28	0.20	0.17	0.30	0.22
1000 °C	0.40	0.28	0.25	0.46	0.33
1200 °C	–	–	–	0.68	0.46

All values are typical average results given for guidance only; they do not constitute a guaranteed specification. Suitability for a specific application should be confirmed by the user.