



## TECHNICAL DATASHEET

### General Product Description

Protecta® Mineral Fibre Bio is made from special alkaline earth silicate (AES) fibres that have been uniquely engineered to offer advantages in high temperature insulation applications. These wool blanket products are lightweight, have low thermal conductivity, low heat storage and excellent resistance to thermal shock.

It is also suitable for use in a wide range of high temperature applications such as furnace lining and blast furnace operation. It can also be used in fire-stopping applications as an easy-to-install, thermal backing material for fire protection sealants. Protecta® Mineral Fibre Bio is user friendly and considered a superior alternative to stonewool (rockwool) as it is easier to shape and fit and its high temperature endurance.

### Properties

- Excellent chemical stability
- Excellent thermal stability
- Excellent tensile strength
- Low thermal conductivity
- Low heat capacity
- Excellent insulation properties
- Good sound insulation
- Flexible and easy to adapt for most applications
- Does not react in contact with other materials
- Fully inert, no dangerous chemicals
- User friendly
- Easy to shape and fit

### Applications

- Furnace kiln, reformer and boiler lining
- Laboratory ovens
- Furnace door lining and seals
- Furnace repair
- Annealing furnace linings
- Investment casting mold wrap
- Stress - relieving blankets
- Reusable steam and gas turbine insulation
- Expansion joints packing
- High temperature gasketing
- Fire protection
- Acoustical service
- Cryogenic insulation
- Superior alternative to stonewool
- Certified as a backing material for fire sealing



### Chemical Composition

COMPONENT % EINECS Number: Alkaline-earth silicate wools 100 (CAS N° 436083-99-7)\* Aluminium foil 0-15 231-072-3 Inert water repellent 0-15 N.A.

\* CAS definition: Alkaline earth silicate (AES) consisting of silica (50-82 wt%), calcia and magnesia (18-43 wt%), alumina, titania

### Technical Data

Type	BIO-BKT128	
Working Temperature	1100°C	
Density	128kg/m <sup>3</sup>	
Heat the permanant linear change (900°C x 12H)	-0.7%	
Thermal Conductivity	0.036 W/M.K	
Shot content	13.97%	
The Anti-Pulls the strength	0.04 MPA	
Colour	White	
Compatability	Can be used against most materials	
Packaging	Box: 25 x 610 x 7200mm	
Storage	Unlimited shelf life when stored dry above 5°C	
	CA0	27.21%
	MG0	5.56%
	FE <sub>2</sub> O <sub>3</sub>	0.12%
	SI0 <sub>2</sub>	64.4%
	AL <sub>2</sub> O <sub>3</sub>	0.31%