



CONDUCT

TECHNICAL SOLUTIONS

Technical datasheet V2; Calcium Silicate High temperature insulation

Description

Calcium silicate fiber blankets exhibit outstanding insulating properties at elevated temperatures. The blanket has excellent thermal stability and retains its original soft fibrous structure up to its maximum continuous use temperature. The insulation blankets are needed from both sides and possesses high strength before and after heating. The material contains neither binder nor lubricant and does not emit any fumes or smell during the first firing. The blankets are flexible, easy to cut and shape and easy to install.

Calcium silicate fiber blankets offers improved handling strength and enhanced thermal properties. The blankets are manufactured from pure raw materials using a new manufacturing technology. In addition to enhanced thermal properties, large nuisance dust particles have been effectively eliminated making the product soft to the touch and less irritating during use.

Type

Blanket made from high temperature insulation wool. CAS number: 329211-92-9

Classification temperature

Calcium silicate fiber blankets: 1200°C (2192°F)

The maximum continuous use temperature depends on the application. Unaffected by most chemicals except strong alkalis, phosphoric acid and molybdenum. For further advise please contact Forfyre BV.

Typical applications

- ⚡ Power generation especially HRSG duct insulation
- ⚡ Chimney insulation
- ⚡ Process heater linings
- ⚡ Pipe wrap
- ⚡ Annealing furnace linings
- ⚡ Furnace and kiln back-up insulation
- ⚡ Storage heater insulation
- ⚡ Domestic oven insulation
- ⚡ Automotive exhaust heat shields
- ⚡ Aluminium transfer launder covers
- ⚡ Welding stress relief
- ⚡ High demanding passive fire protection applications





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Benefits

- ⚡ Exceptional thermal insulating performance compared with industry standards
- ⚡ Free of binder or lubricant
- ⚡ Immune to thermal shock
- ⚡ Low heat storage
- ⚡ Good resistance to tearing
- ⚡ Flexible and resilient
- ⚡ Good sound absorption
- ⚡ Calcium Silicate wool fibre meets the requirements specified under NOTE Q of European Regulation 1272/2008
- ⚡ All Calcium Silicate wool fibre products are therefore exonerated from labelling requirements in Europe
- ⚡ No requirement for warning labels under Globally Harmonised System (GHS) for the classification and

Metric Information

Classification temperature °C	1200				
Colour	White				
Density, kg/m ³	64	80	96	128	
Thermal conductivity, ASTM C-201, W/mK	@200 °C	0.06	0.06	0.05	0.05
	@400 °C	0.11	0.09	0.09	0.08
	@600 °C	0.18	0.15	0.14	0.12
	@800 °C	0.29	0.24	0.21	0.18
	@1000 °C	0.42	0.36	0.29	0.25
Tensile strength, EN 1094-1 kPa	30	45	55	75	
Permanent linear shrinkage ENV 1094-1, % After 24 hours isothermal heating, % @ 1200 °C	1				
Chemical composition %					
SiO ₂	62-68				
CaO+MgO	-				
CaO	26-32				
MgO	3-7				
Other oxides	< 1				



Availability and Packaging

The blankets are packed in cartons, 1260 x 940mm pallet + stretchable film. Marks () and width 1220mm upon request (subject to minimum order requirements)

Thickness mm	Density kg/m ³				Length mm	Width mm
	64	80	96	128		
6				X	4 x 5500	610
10			X	X	18500	610
13		X	X	X	14640	610
19	X	X	X	X	9760	610
25	X	X	X	X	7320	610
38	X	X	X	X	4880	610
50	X	X	X	X	3660	610