

## Kaowool™ Blanket S/Kaowool™ Blanket SZr



### TYPE

Refractory fibre blanket

### CLASSIFICATION TEMPERATURE

Kaowool Blanket S (Standard): 1260°C

Kaowool Blanket SZr (Zirconia): 1425°C

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

### DESCRIPTION

Kaowool™ Blanket S and SZr are made from bulk fibres produced by the most modern spinning process. This produces fibres of exceptional length and uniform distribution which are ideal for manufacturing blanket of controlled density, high tensile strength and resiliency

### BENEFITS

- Excellent thermal shock resistance
- No smoke emission due to binder burn out
- Unaffected by most chemicals, except hydrofluoric acid, phosphoric acids and strong alkali
- Low heat storage
- Good acoustic properties
- Easy to install

### APPLICATIONS

- Furnace linings - all industries: iron & steel, non-ferrous, aluminium, bricks and ceramics/pottery
- Petrochemical: crackers, heaters and ducts
- Cladding/lining waste-heat ducts
- Cladding of exhausts
- Acoustic insulation
- Steam turbine insulation
- Hot boxes
- Domestic appliances
- Automobiles/vehicles

## Kaowool™ Blanket S/Kaowool™ Blanket SZr

### Main Properties

	Kaowool™ S	Kaowool™ SZr
Classification temperature (°C)	1260	1425
<b>Properties Measured at Ambient Conditions (23°C/50% RH)</b>		
Colour	White	White
Density (EN 1094-1) (kg/m <sup>3</sup> )	64 up to 160 (4 densities available)	
Tensile strength (NF-B-40-456) (kPa):		
64kg/m <sup>3</sup>	39	39
96 kg/m <sup>3</sup>	78	78
128 kg/m <sup>3</sup>	103	103
160 kg/m <sup>3</sup>	127	127
<b>High Temperature Performance</b>		
Permanent linear shrinkage (%) (NF-B-40-452) after 24 hours isothermal heating at:		
1000°C	1.5	-
1100°C	2.2	-
1200°C	3.0	1.0
1300°C	5.5	2.0
1400°C	-	3.0

Thermal Conductivity at mean temperature of (both grades) (W/m.K):	64kg/m <sup>3</sup>	96 kg/m <sup>3</sup>	128 kg/m <sup>3</sup>
200°C	0.07	0.06	0.06
400°C	0.12	0.11	0.10
600°C	0.20	0.16	0.15
800°C	0.30	0.23	0.20
1000°C	0.43	0.32	0.27

## Kaowool™ Blanket S/Kaowool™ Blanket SZr

	Kaowool™ S	Kaowool™ SZr
Specific heat at 1090°C (both grades) (kJ/kg.K)	-	1.13

Chemical Composition (%)		
	Kaowool™ S	Kaowool™ SZr
Al <sub>2</sub> O <sub>3</sub>	44	34.9
SiO <sub>2</sub>	56	50.0
Cr <sub>2</sub> O <sub>3</sub>	-	-
ZrO <sub>2</sub>	-	15.2
Fe <sub>2</sub> O <sub>3</sub> + TiO <sub>2</sub>	0.15	0.15
CaO + MgO	0.05	0.09
Na <sub>2</sub> O + K <sub>2</sub> O	0.10	0.10

### Availability and Packaging

Blankets are packed in cartons, on pallets wrapped in stretchable film.

Thick (mm)	Kaowool™ Blanket S				Kaowool™ Blanket SZr				Length (mm)	Width (mm)	m <sup>2</sup> /carton
	64	96	128	160	64	96	128	160			
6		X	X	O					25,62,	610	13.42
10		X	X	O					18,500	610	11.28
13	X	X	X	O		X	X		14,640	610	8.93
19	O	X	X	O					9760	610	5.95
25	X	X	X	X		X	X	X	7320	610	4.46
38	X	X	X	O	O	O	X	O	4880	610	2.98
50	O	X	X		O	O	X	X	3660	610	2.23

Marks (O) and width 1220mm 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.

[www.morganadvancedmaterials.com](http://www.morganadvancedmaterials.com)

Europe: +44 (0) 151 334 4030 / [marketing.tc@morganplc.com](mailto:marketing.tc@morganplc.com)

North America: +1 (0) 706 796 4200 / [northamerica.tc@morganplc.com](mailto:northamerica.tc@morganplc.com)

South America: +54 (11) 4373 4439 / [marketing.tc@morganplc.com](mailto:marketing.tc@morganplc.com)

Asia: +65 (0) 6595 0000 / [asia.mc@morganplc.com](mailto:asia.mc@morganplc.com)