

ALSIFLEX® blankets and bulk

ALSIFLEX® is a refractory ceramic fibre based on aluminium and silicon oxide.

ALSIFLEX® blankets and bulk are lightweight, flexible insulating materials with high permanent temperature resistance, low thermal conductivity and partly high chemical resistance.



This insulating material is an important component for economical, modern thermal insulation, from industrial furnace right down to household appliance construction industry. The homogeneous, long-fibre structure improves the various technical properties.

ADVANTAGES AND PROPERTIES

- Lightweight and flexible
- Low thermal conductivity and heat storage
- High thermal and chemical resistance
- High thermal shock resistance
- Easy to work
- Electrically non-conductive
- Numerous delivery forms
- Prefabricated building components and cut sections

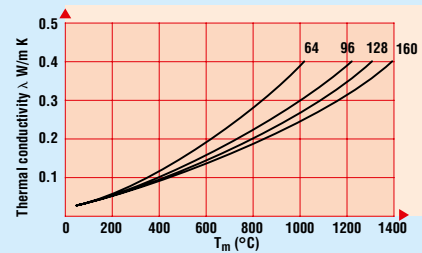
ALSIFLEX® is classified into four temperature ranges according to the type designation. Depending on the application field, installation system and operating conditions, the application limit is generally 100°-150° C below the classification temperature. In special cases, application up to the classification temperature is possible. ALSIFLEX® mats are designated according to the classification temperatures and bulk densities, e. g. ALSIFLEX®-1260/128 corresponds to 1260 °C and 128 kg/m³ bulk density.

WORKING AND PROCESSING

ALSIFLEX® can be cut, punched and worked using conventional tools, e. g. knives and machines. When working and processing ceramic fibre products, the Technical Regulations for Hazardous Materials (TRGS) must be observed.

AREAS OF APPLICATION

- ALSIFLEX® ceramic fibre mats are used in many industrial areas such as:
- Refractory construction
- Household appliances
- Petrochemical industry
- Automobile and aircraft industry
- Steel industry
- Front insulation of refractory linings
- Expansion joints



TECHNICAL DATA

Product name	ALSIFLEX® ceramic fibre blankets		ALSIFLEX® bulk fibres			
	1260	1430	1260	1430		
Type	1260	1430	1260	1430		
Colour	white	white	white	white		
Classification temperature	1260	1430	1260	1430	°C	
Melting point	1760	1740	1760	1700	°C	
Bulk density ρ	64/96/128/160	96/128/160	350	300	kg/m³	
Specific heat capacity c	1,13 (1000°C)	1,03 (1140°C)			kJ/kgK	
Shrinkage after 24h at testing temperature	3,5 (1260°C)	1,8 (1300°C)	2,8 (1100°C)	3 (1400°C)	%	
Thermal conductivity λ (at bulk density 128 kg/m³)						
	400°C	0,07	0,09		W/mK	
	600°C	0,12	0,14		W/mK	
	800°C	0,16	0,2		W/mK	
	1000°C	0,27	0,27		W/mK	
	1200°C	0,34	0,34		W/mK	
	1400°C	-	-		W/mK	
Chemical analysis	Al ₂ O ₃	50,5	30,7	47,1	30-32	%
	SiO ₂	49,1	49,0	52,3	50-54	%
	ZrO ₂	-	17,9	-	16	%

STANDARD SIZES

RCF have been classified as a category 2 carcinogen under EU directive 67/548/EC. Therefore avoid exposure and obtain special instructions before use. MSDS-sheets are available on request.

Promat contains the right to change without notice the properties and values of all products. The given technical values are obtained in specific conditions and are average and indicative. In case of any doubt if these properties and/or values are matching the application requirements, please contact Promat for advise.

ALSIFLEX® 1260°C blankets		ALSIFLEX® 1430°C blankets	
Dimensions	Rolls/pallet	Dimensions	Rolls/pallet
ALSIFLEX® 1260°C – 64 kg/m³		ALSIFLEX® 1430°C – 96 kg/m³	
610 x 14640 x 12,7 mm	20	610 x 14640 x 12,7 mm	16
610 x 7320 x 25,4 mm	20	610 x 9630 x 19 mm	16
610 x 3660 x 50,8 mm	20	610 x 7320 x 25,4 mm	16
		610 x 4880 x 38 mm	16
		610 x 3660 x 50,4 mm	16
ALSIFLEX® 1260°C – 96 kg/m³		ALSIFLEX® 1430°C – 128 kg/m³	
610 x 14640 x 12,7 mm	16	610 x 14640 x 12,7 mm	16
610 x 9630 x 19 mm	16	610 x 9630 x 19 mm	16
610 x 7320 x 25,4 mm	16	610 x 7320 x 25,4 mm	16
610 x 4880 x 38 mm	16	610 x 4880 x 38 mm	16
610 x 3660 x 50,4 mm	16	610 x 3660 x 50,4 mm	16
ALSIFLEX® 1260°C – 128 kg/m³		ALSIFLEX® 1430°C – 160 kg/m³	
610 x 14640 x 12,7 mm	16	610 x 7320 x 25,4 mm	16
610 x 9630 x 19 mm	16		
610 x 7320 x 25,4 mm	16		
610 x 4880 x 38 mm	16		
610 x 3660 x 50,4 mm	16		
ALSIFLEX® 1260°C – 160 kg/m³		ALSIFLEX® bulk	
610 x 14640 x 12,7 mm	16	1260°C	20 kg/bag
610 x 7320 x 25,4 mm	16	1430°C	20 kg/bag
610 x 3660 x 50,8 mm	16		