

## K-Shield® BF Papers

Datasheet Code US: 5-14-805

SDS: 201

### Product Description

K-Shield BF Paper is an organic-free paper produced from premium, cleaned Kaowool high-purity fibers in a unique paper-making process. The cleaning process of these special fibers dramatically improves the thermal conductivity and insulating value of the product. K-Shield BF Paper offers excellent thermal resistance and good handling strength with no off-gassing.

### Features

- 100% binder free
- Extremely low shot (unfiberized material) content
- Very low thermal conductivity and heat storage
- Excellent high-temperature parting agent
- Thin, flexible high-temperature insulation
- Good fired strength
- Easily die-cut for gaskets

### Applications

- Separating media to prevent sticking
- Vacuum heat treating furnaces
- Parting agent in brazing and heat treating
- Powered Metal sintering
- Applications that require good fired strengths
- Commercial Appliance Insulation

### Standard Size and Availability

Products	Thickness, in (mm)	Width, in (mm)	Sq Ft/Roll (M)	Mill Rolls, Linear Ft/Roll (M)
K-Shield BF	1/32 (0.8)	12 (305)	1000 (33)	-
	1/32 (0.8)	24 (610)	1000 (33)	-
	1/32 (0.8)	48 (1220)	1000 (33)	-
	1/16 (2)	12 (305)	500 (46)	750 (229)
	1/16 (2)	24 (610)	500 (46)	750 (229)
	1/16 (2)	48 (1220)	500 (46)	750 (229)
	1/8 (3)	12 (305)	250 (23)	375 (114)
	1/8 (3)	24 (610)	250 (23)	375 (114)
	1/8 (3)	48 (1220)	250 (23)	375 (114)
	¼ (6)	12 (305)	125 (12)	185 (56)
	¼ (6)	24 (610)	125 (12)	185 (56)
	¼ (6)	48 (1220)	125 (12)	185 (56)

## K-Shield® BF Paper

Paper Product Name	<b>K-Shield BF</b>
Fiber Class	RCF
<b>Physical Properties</b>	
Color	white
Continuous Use Temperature, °F	2300
Continuous Use Temperature, °C	1260
Classification Temperature, °F	2400
Classification Temperature, °C	1316
Density, pcf	8-10
Denisty, kg/m <sup>3</sup>	128-160
Tensile strength, psi	15-25
Tensile strength, Mpa	0.1-0.17
Fired Tensile strength, psi	15-25
Fired Tensile strength, Mpa	0.1-0.17
Fiber index, %	75
<b>Chemical Analysis, % weight basis after firing</b>	
Alumina, Al <sub>2</sub> O <sub>3</sub>	51
Silica, SiO <sub>2</sub>	49
Other	trace
Loss of Ignition, LOI	0.5 max
<b>Thermal Conductivity, BTU•in/hr•ft<sup>2</sup>, per ASTM C201</b>	
500°F	0.38
1000°F	0.59
1500°F	0.85
2000°F	1.18
<b>Thermal Conductivity, W/m•K, per ASTM C201</b>	
260°C	0.05
538°C	0.09
816°C	0.12
1093°C	0.17

The values given herein are typical average 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 Morgan Advanced Materials office to obtain current information.