

# Superwool<sup>®</sup> Prime Felt

## Product Data Sheet



### Product Description

Superwool Prime Felt is manufactured with our newly innovated Superwool Prime low biopersistent fibres and hot pressing.

Superwool Prime Felts is bonded with an organic binder which begins to burn out at 180°C.

This special binder makes Superwool Prime Felt particularly suitable for die-cutting operations.

Semi rigid, it is neither brittle or dusty, Superwool Prime Felt optimises the manufacture of complex, die-cut shapes to close tolerances.

### Features

- Densities ranging from 96 to 160kg/m<sup>3</sup>
- High temperature resistance
- Low thermal conductivity
- Flexible to semi-rigid, depending on density selected
- Chemically stable
- Thickness controls
- Thermal shock resistant
- Low heat storage
- Suited to cutting operations (with saw, water jet or by stamping)
- Excellent sound absorption characteristics

### Applications

- Die cut shapes for domestic appliances
- Thermal barrier media
- Insulating thermal break
- High temperature gaskets
- Expansion joints for furnace, kiln and boiler linings

### Environmental & Health Safety

Superwool low biopersistent fibres manufactured by Morgan Advanced Materials are not classified as carcinogenic by IARC or under any national regulations on a global basis. They have no requirements for warning labels under GHS (Globally Harmonised System for the classification and labelling of chemicals).

In Europe, Superwool fibres meet the requirements specified under Note Q of European Regulation EC/1272/2008 (on Classification, Labelling and Packaging of substances and mixtures). All Morgan Advanced Materials Superwool low biopersistent fibre products are therefore exonerated from classification and labelling as hazardous in Europe.

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Properties		Superwool Prime Felt		
Region of Manufacture		EMEA		
Colour		Yellow		
Classification Temperature, °C (°F), EN 1094-1 2008		1300 (2372)		
Continuous Use Temperature °C (°F)		1150-1200 (2100-2192)		
Density, kg/m <sup>3</sup> , EN 1094-1 2008		96, 128, 160		
	Dry, as supplied			
<b>Tensile strength, MPa, EN 1094-1 2008</b>				
	96 kg/m <sup>3</sup>	35		
	128 kg/m <sup>3</sup>	45		
	160 kg/m <sup>3</sup>	55		
<b>Loss of Ignition, %</b>				
		7		
<b>Permanent Linear Shrinkage, %, after 24 hours, ENV 1094-1</b>				
	1200°C (2192°F)	<2		
	1300°C (2372°F)	<4		
<b>Chemical Analysis, %</b>				
	Silica, SiO <sub>2</sub>	64-70		
	Calcium oxide, CaO	29-35		
	Other	<3		
<b>Thermal Conductivity, W/m•K, ASTM C201</b>				
	<u>Density, kg/m<sup>3</sup></u>	<u>96</u>	<u>128</u>	<u>160</u>
	200°C	0.06	0.04	0.04
	400°C	0.10	0.08	0.07
	600°C	0.17	0.14	0.12
	800°C	0.26	0.21	0.18
	1000°C	0.38	0.30	0.25
	1100°C	0.44	0.35	0.26
	1200°C	0.52	0.40	0.33

### Standard Product Dimensions and Availability

This product availability and packaging reflects the European manufactured Superwool Prime Felt. Please contact your regional Morgan Advanced Materials - Thermal Ceramics representative for packaging availability for your local needs.

Thickness, mm	Density, kg/m <sup>3</sup>			Quantity / Box	Minimum Order Quantity (Box)
	96	128	160		
6	X	X	X	22	2
10	X	X	X	12	3
13	X	X	X	10	3
19	X	X	X	7	3
25	X	X	X	5	4

The product(s) represented are intended for industrial refractory applications. The values and application information in this datasheet are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials – Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product, and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials.