

Superwool® 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/m³
- 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 Yellow 1300 (2372)							
Colour								
Classification Temperature, °C (°F), EN 1094-1 2008								
Continuous Use Temperature °C (°F)	1150-1200 (2100-2192)							
Density, kg/m³, EN 1094-1 2008								
Dry, as supplied	96, 128, 160							
Tensile strength, MPa, EN 1094-1 2008								
96kg/m³	35							
128kg/m³	45							
160kg/m ³	55							
Loss of Ignition, %	7							
Permanent Linear Shrinkage, %, after 24 hours, ENV 1094-1								
1200°C (2192°F)	<2							
1300°C (2372°F)	<4							
Chemical Analysis, %								
Silica, SiO ₂	64-70							
Calcium oxide, CaO	29-35							
Other	<3							

Thermal Conductivity, W/m•K, ASTM C201									
Density, kg/m ³	<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.

Thiskness was	Density, kg/m³			Quantity /	Minimum Order
Thickness, mm	96	128	160	Box	Quantity (Box)
6	Х	Х	Х	22	2
10	Χ	Х	Χ	12	3
13	Χ	Х	Χ	10	3
19	Χ	Х	Χ	7	3
25	Χ	Х	Х	5	4

Whilst the values and application information in this datasheet are typical, they 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 - Thermal Ceramics.

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