Superwool® Plus MD Papers

Product Data Sheet

Product Description

Superwool Plus MD Papers are unique papers manufactured using our patented Superwool low biopersistent fibre in a non-woven matrix. Special organic binders and fillers give them strength and distinct physical properties suitable for various applications.

Superwool Plus MD Papers feature improved handleability, flexibility, and tears resistance. These papers have unmatched thermal and physical properties and have excellent non-wetting characteristics for applications requiring direct contact with molten aluminium.

The organic binder burns out cleanly on the first firing at approximately 300°C (572°F), with ignition starting at 180°C (356°F). Superwool Plus MD Paper is available in a black version and also a white version.

Superwool provides stability and resistance to chemical attacks. Exceptions include hydrofluoric acid, phosphoric acid and strong alkalis (i.e. NaOH, KOH). Superwool is unaffected by incidental spills of oil or water. Thermal and physical properties are restored after drying.

Please contact your regional Morgan Advanced Materials - Thermal Ceramics representative to support your application requirements.

Features

- Low biopersistence fibre
- Excellent thermal insulating performance
- Thin, flexible high-temperature insulation
- Immune to thermal shock
- Low heat storage
- Easily die-cut to form complex shapes
- Excellent tensile strength
- Low thermal conductivity
- Non-wetting to molten aluminium

Applications

- Gasketing for Industrial applications and domestic appliances
- Glazing applications
- Automotive heat shields and muffler insulation
- Passive Fire Protection applications

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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Thermal Ceramics is a business of Morgan Advanced Materials

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Properties	Superwool Plus MD Paper
Region of Manufacture	EMEA
Color	White, Black
Continuous Use Temperature, °C (°F)	1000 (1832)
Classification Temperature, °C (°F), ENV 1094-1 (2008)	1200 (2192)
Density, kg/m^3 (pcf), ENV 1094-1 (2008)	210 (14.4)
Tensile strength, MPa (psi), ENV 1094-1 (2008)	>0.65 (>94)
Loss of Ignition, %,	12-16
Permanent Linear Shrinkage, %, ENV 1094-1	
after 24 hours @ 1000°C (1832°F)	<2
Chemical Analysis, %	
Alumina, Al_2O_3	trace
Silica, SiO_2	62 - 68
Calcia, CaO	26 - 32
Magnesia, MgO	3 - 7
Other	<1
Thermal Conductivity, W/m•K, ASTM C201	
200°C	0.05
400°C	0.07
600°C	0.11
800°C	0.15
1000°C	0.21
Thermal Conductivity, BTU•in/hr•ft^2•°F, ASTM C201	
500°F	0.38
1000°F	0.66
1500°F	1.08
2000°F	1.67

Product Availability

Superwool Plus MD Papers are manufactured in our EMEA region, and are available globally.

Please contact your regional Morgan Advanced Materials - Thermal Ceramics representative to support providing specific packaging availability for your local business needs.

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