Superwool® Plus Paper

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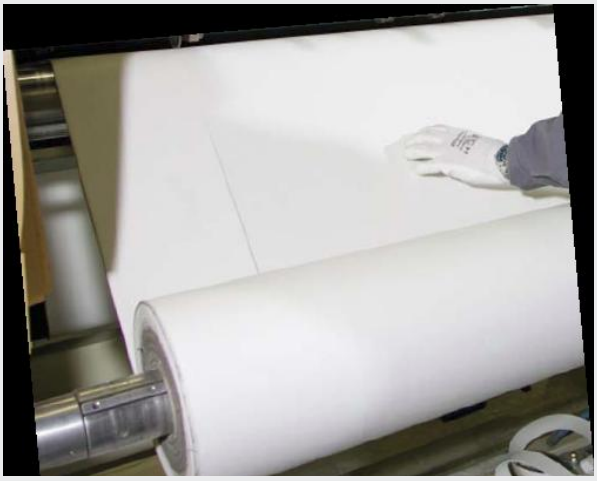

Description

Superwool® Plus™ Paper offers the same benefits of the current Superwool® fibre family with improved handleability and enhanced thermal properties. Superwool® Plus™ Paper is manufactured from pure raw materials using a new proprietary technology. In addition to enhanced thermal properties, large nuisance dust particles have been effectively eliminated making the product less irritating during use.

Superwool® Plus™ Paper is made of Superwool® Plus long fibres bonded with a low percentage of organic binder.

Superwool® Plus™ Paper has excellent thermal insulation characteristics and exceptional handling properties.

Superwool® Plus™ Paper is very flexible and resistant to tearing, and particularly suited to all applications requiring further processing (laminated composites, die-cutting, rolling, folding).

The organic binder burns out clearly on the first firing at approximately300°C with ignition starting at 180°C.

Classification Temperature

1200°C / 2192°F EN 1094-1

Morgan Thermal Ceramics quote all thermal conductivity data according to the ASTM C-201 method.

With Superwool® Plus fibre, the consistent use of pure raw materials in all our factories globally has lead to the 4% shrinkage temperature rising from >1100°C to >1200°C. For this reason, the classification temperature is now given as 1200°C in line with the EN-1094-1 norm.

Superwool® Plus™ fibres have been proven over many years to withstand continuous use in an oxidising atmosphere at 1000°C. This temperature is quoted as the Maximum Continuous Use temperature. For applications above 1000°C, Morgan Thermal Ceramics recommends Superwool® 607HT™ fibre which has a classification temperature of 1300°C.

For further information, contact your local Morgan Thermal Ceramics office.

Typical Applications

- Industrial and domestic appliance gasketing
- Non-Ferrous ingot mould liners
- Aluminium transfer system back-up insulation
- Parting medium in induction furnaces
- Automotive heat shields

Benefits

- Good resistance to tearing
- High fibre index
- Flexible and resilient
- Low shot content
- Precise thickness
- Smooth on both sides
- Resistant to thermal shock
- Very low thermal conductivity
- Easy to die-cut
- Not affected by the presence of molten aluminium
- Exonerated from any carcinogenic classification under nota Q of directive 97/69 EC
- Exonerated from any use restriction under annexe V number 7.1 of the German hazardous substances regulation

SUPERWOOL® is a patented technology for high temperature insulation wools which have been developed to have a low bio persistence (information upon request). This product may be covered by one or more of the following patents, or their foreign equivalents:- SUPERWOOL® PLUS™ products are covered by patent numbers:- US5714421, US5994247, US6180546, US7259118, and EP0621858. SUPERWOOL® 607HT™ products are covered by patent numbers:- US5955389, US6180546, US7259118, US7470641, US7651965, US7875566, EP0710628, EP1544177, and EP1725503. A list of foreign patent numbers is available upon request to The Morgan Crucible Company plc.

Superwool® Plus Paper

Main properties

Colour:	White
Density Range:	190 - 210 kg/m3
Tensile Strength:	(EN 1094-1) (MPa) >0.65

High Temperature Performance

Loss on Ignition	%	8
Linear Shrinkage at 1000°C	%	<2

Thermal Conductivity (ASTM C-201)

Following the decision by the European standards committee to withdraw the Thermal Conductivity test according to EN1094-1 as being inaccurate, Morgan Thermal Ceramics has decided to quote all Thermal Conductivity data according to the well established ASTM C-201 method.

Thermal conductivity (ASTM C-201):	
Mean Temperature	**W/m.K**
200°C	0.05
400°C	0.07
600°C	0.11
800°C	0.16
1000°C	0.23

Availability & Packaging

Superwool® Plus Paper is available in 1000mm, 610mm and 500mm wide rolls packed in cartons

Thickness (mm)	Length (m)
0.5	80
1	40
2	20
3	15
4	10
5	10
6	10
7	10
8	10
9	10
10	10

Non standard roll widths and lengths can also be supplied.