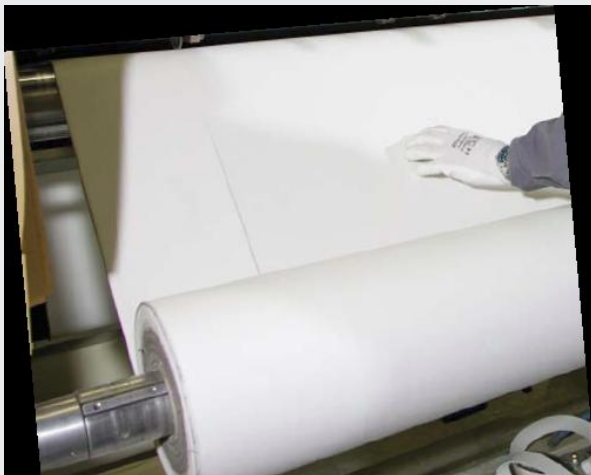


Superwool® Plus Paper



Datasheet Code EU: 11-5-00 E

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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 approximately 300°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 led 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/m ³
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.

The values given herein are typical 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 Thermal Ceramics office to obtain current information.