

Data sheet

Superwool® Bulk

ENGLISH

Superwool Plus and Superwool HT Bulk offer improved handling strength and enhanced thermal properties.

Superwool Plus and Superwool HT Bulk are manufactured from pure raw materials using a new manufacturing technology. In addition to enhanced thermal properties, large nuisance dust particles have been effectively eliminated making the product soft to the touch and less irritating during use.

Superwool Plus Bulk is made of Superwool Plus long fibres
Superwool HT Bulk is made of Superwool HT long fibres

Both Superwool Plus Bulk and Superwool HT Bulk consist of a loose mass of randomly orientated low bio persistent fibres. Superwool Plus Bulk has excellent thermal stability and retains its original soft fibrous structure up to its maximum continuous use temperature of 1000°C (1832°F). Above that limit the material will start to show signs of hardening due to crystallisation and so we would recommend Superwool HT Bulk as an alternative with a maximum continuous use temperature of 1150°C (2102°F). Superwool Plus Bulk and Superwool HT Bulk contain no binder and do not emit fumes or smell during the first firing.

Type

Bulk high temperature insulation wool.



Classification temperature

Superwool Plus Bulk: 1200°C (2192°F)
Superwool HT Bulk: 1300°C (2372°F)

The maximum continuous use temperature depends on the application. Unaffected by most chemicals except strong alkalis, phosphoric acid and molybdenum. For further advice please contact your local Morgan Advanced Materials partner.

Grades available

Lubricated Bulk

Superwool Plus : Code 103

Superwool HT : Code 73

2 lengths available:

- Extra Long
- Long fibre

For infill in the roofs and walls of certain types of kilns

For seals around penetrations in furnaces, such as burner tubes, site holes etc, areas in refractory construction.

Un-lubricated Bulk

Superwool Plus : Code 100

Superwool HT : Code 70

Fibre length available:

- Extra Long fibre
- Long fibre
- Medium fibre
- Short fibre
- Extra short fibre
- HM-12, HM-25, HM-50, 111 (page 3 imperial)

Un-lubricated fibre is used in vacuum forming processes, mastics, moldables sprays and coatings. Selection of different fibre lengths controls the properties of the final product.

Typical applications

- Vacuum forming feedstock
- Textile manufacturing
- Building expansion joints
- Chimney fill
- Fire door infill

Benefits

- Superwool Plus Bulk is virtually immune to thermal shock
- The fibres are opaque to infra-red and so maintain their low thermal conductivity to high temperature
- The fibres absorb very little energy on heating
- The fibres are high purity and non-corrosive
- The fibres are resilient and also resistant to mechanical damage
- Exonerated from any carcinogenic classification under nota Q of directive 97/69 EC

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Superwool® Bulk

	Superwool Plus Bulk	Superwool HT Bulk
Classification temperature, °C (°F)	1200 (2192)	1300 (2372)
Maximum continuous use temperature, °C (°F)	1000 (1832)	1150 (2100)
Colour	White	White
Density, kg/m ³ (pcf), measurement on blanket	64, 80, 96, 128 (4, 5, 6, 8)	96, 128 (6, 8)
Specific gravity, g/cm ³	2.65	2.50
Mean fiber diameter (µm)	2.5 - 3.4	3.5 - 5
Chemical composition, %		
	SiO ₂	62 - 68
	CaO+MgO	-
	CaO	26 - 32
	MgO	3 - 7
	Others	<1
		70 - 80
		18 - 25
		-
		-
		<3

Availability and Packaging (Europe)

Bales: Superwool Plus and Bulk Superwool HT Bulk are available in 70kg bales (only non-lubricated).

Bags: The following grades of Superwool Plus Bulk and Superwool HT Bulk are available in polyethylene bags packed in 1200 x 1100mm pallet (30 bags per pallet) with the following weight :

Type	Grade	Bag weight. kg
Superwool Plus and Superwool HT Lubricated Fibre	Extra Long	10
	Long	15
Superwool Plus and Superwool HT unlubricated Fibre	Extra Long	10
	Long	15
	Medium	17
	Short	20
	Extra Short	25

Please check with your local supplier for more information.

Availability and Packaging (North America)

Bulk fibres are packaged in either cartons or bags and stretch-wrapped onto pallets. Standard Packaging on Lubricated Bulk Fibers is 25 lb cartons. Standard Packaging on Un-Lubricated Bulk Fibers is 40 or 50 lb bags.

Type	Grade	Fibre index, %	Fibre length, in (mm)	Lubrication
Superwool Plus and Superwool HT	111	45 - 70	up to 10 (254)	Yes
	112	45 - 70	up to 10 (254)	No
	HM-12	50 - 70	1/2 (12.7)	No
	HM-25	50 - 70	1 (25.4)	No
	HM-50	50 - 70	2 (50.8)	No
Engineered Fibres	Various	60 - 90	Various	No

Please check with your local office for more information.

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SUPERWOOL is a patented technology for high temperature insulation wools which have been developed to have a low bio persistence (information upon request). **SUPERWOOL** products may be covered by one or more of the following patents, or their foreign equivalents:
SUPERWOOL PLUS and **SUPERWOOL HT** products are covered by patent numbers:
US5714421 and US7470641, US7651965, US7875566, EP1544177 and EP1725503 respectively.

A list of foreign patent numbers is available upon request to Morgan Advanced Materials plc.

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