

Data sheet

ENGLISH

Alphawool® Unifelt™

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Alphawool® Unifelt™ is made of polycrystalline bulk fibres bonded with an organic binder which burns out on exposure to 180-200°C (356-392°F).

Alphawool® Unifelt™ demonstrates excellent flexibility with excellent dimensional resilience after compression and makes utilization of the felt or cut pieces very easy to handle compared to rigid products.

Alphawool® Unifelt™ is supplied in a wide range of thickness minimum 6mm to a maximum 50mm (combining light weight, high heat resistance, and low thermal conductivity).

Type

Vacuum formed felt manufactured from Alphawool bulk fibres.

Classification temperature

1600°C (2912°F) (EN-1094-3)

The maximum continuous use temperature depends on the application. Please contact Morgan Advanced Materials, Thermal Ceramics for advice.

Availability

Alphawool Unifelt is manufactured to order so please check with your local sales office on lead-times.

Typical applications

- Expansion joints
- Furnace lining
- Gaskets

Benefits

- Not classified as dangerous under EC Directive 67/548/EEC or according to self-classification guidelines (please see MSDS 219-3-EURO)
- High chemical purity
- Excellent insulating performance
- Flexibility, good resilience
- Excellent thermal stability
- Excellent chemical stability in industrial process conditions
- Low heat storage
- Resistance to thermal shock
- Can be easily cut



SDS:
EU: 230
NA: n/a
GHS: n/a

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Properties measured at ambient conditions (23°C/50%RH)	Alphawool Unifelt
Colour	White/tan
Density	Minimum 90kg/m ³
Loss on ignition	<5%
Permanent linear shrinkage (EN 1094-1) after 24 hours isothermal heating at 1600°C	<2%
Thermal conductivity (ASTM-C201) at mean temperature	
400°C W/m K	0.06
600°C W/m K	0.09
800°C W/m K	0.14
1000°C W/m K	0.21
1200°C W/m K	0.29
1300°C W/m K	0.34
1400°C W/m K	0.39
Typical chemical analysis % by weight	
Al ₂ O ₃	93-96
SiO ₂	3-5
Others	0-2

Contact

Europe:

 Telephone:
+44 (0) 151 334 4030

 E-mail:
marketing.tc@morganplc.com

North America:

 Telephone:
+1 (706) 796 4200

 E-mail:
northamerica.tc@morganplc.com

South America:

 Telephone:
+54 (11) 4373 4439

 E-mail:
marketing.tc@morganplc.com

Asia:

 Telephone:
+65 6595 0000

 E-mail:
asia.mc@morganplc.com

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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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