

## Bulk products - Superwool® AES Grades

Product Name	Superwool® Plus	Superwool® HT
Color	white	
Continuous temperature use limit, °F (°C)	1832 (1000)	2102 (1150)
Classification temperature rating, °F (°C)	2192 (1200)	2372 (1300)
Specific Heat, BTU/lb•°F @ 1800°F (kJ/kg•°C @ 982°C)	0.26	
Chemical Analysis, %, Weight basis after firing		
Silica, SiO <sub>2</sub>	62 - 68	70 - 80
Calcium Oxide + Magnesium Oxide, CaO + MgO	29 - 39	18 - 25
Other	< 1	< 3
Leachable Chlorides	trace	-

### Availability and Packaging

Brand	Grade	Typical Fibre Index, %	Fibre Length, in (mm)	Lubrication
Superwool Plus Superwool HT	111	45 - 70	up to 10	Yes
	112			
	HM-12	50 - 70	1/2	No
	HM-25		1	
	HM-50		2	
Engineered Fibres	Various	60 - 90	Various	

Thermal Ceramics bulk fibres packaged out of Augusta are in either cartons or bags and stretch-wrapped onto pallets. Standard packaging on lubricated bulk fibres is 25lb (11kg) cartons. Standard packaging on un-lubricated bulk fibres is 40 or 50lb (18 or 23kg) bags. Please check with your Thermal Ceramics office for current lead times and availability.

**Safety Data Sheet (SDS):** are available for all our products. Data sheets, in other languages, can also be found by visiting our website. Please visit our website [www.morganthermalceramics.com](http://www.morganthermalceramics.com) and click on the Safety Data Sheets Quick Link on our home page.

While the values and application information in these datasheets are typical, they are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials - Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials - Thermal Ceramics.

## Bulk products - RCF Grades

Product Name	Kaowool®	Kaowool HP	Cerafiber®	Cerachem®	Cerachrome®
Color	off white	white			blue/green
Continuous temperature use limit, °F (°C)	2000 (1093)	2150 (1177)		2400 (1316)	2500 (1371)
Classification temperature rating, °F (°C)	2300 (1260)	2400 (1316)		2600 (1427)	
Specific Heat, BTU/lb•°F @ 1800°F (kJ/kg•°C @ 982°C)	0.26 (1.08)				
Chemical Analysis, %, Weight basis after firing					
Alumina, Al <sub>2</sub> O <sub>3</sub>	45	46		35	43
Silica, SiO <sub>2</sub>	50 - 55	54		50	54
Zirconia, ZrO <sub>2</sub>	-	-		15	-
Ferric oxide, Fe <sub>2</sub> O <sub>3</sub>	1.0				
Titanium oxide, TiO <sub>2</sub>	2.2				
Alkalies as Na <sub>2</sub> O	0.2				
Other	-	trace			3
Leachable Chlorides	1 - 2				trace

## Availability and Packaging

Brand	Grade	Typical Fibre Index, %	Fibre Length, in (mm)	Lubrication
Kaowool	BN	45 - 55	4 (100)	No
	D			Yes
	A			No
	HM-12	1/2 (13)		
	HM-25	1 (25)		
	HM-50	2 (50)		
Kaowool HP	HY	45 55	1/2 (13)	Yes
	HA		4 (100)	
	A			
Cerafiber Cerachem Cerachrome	I 11	50	up to 10 (up to 250)	No
	I 12			
	HM-12		1/2 (13)	
	HM-25		1 (25)	
HM-50	2 (50)			
Engineered Fibres	Various	60-90	Various	

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## Bulk products - PCW Grade

<b>Product Name</b>	<b>Denka® Alcen™ B97T4</b>	
<b>Color</b>	white	
<b>Classification temperature rating, °F (°C)</b>	2912 (1600)	
<b>Melting temperature, °F (°C)</b>	3632 (2000)	
<b>Fibre diameter, µm</b>	3 - 5	
<b>Chemical Analysis, %, Weight basis after firing</b>		
	Alumina, Al <sub>2</sub> O <sub>3</sub>	97
	Silica, SiO <sub>2</sub>	3
	Other	<0.5
<b>Mineral Composition (B97T4), %</b>		
	alpha-Alumina, Al <sub>2</sub> O <sub>3</sub>	40 - 49
	Mullite	≤10

## Availability and Packaging

<b>Brand</b>	<b>Grade</b>	<b>Typical Fibre Index, %</b>	<b>Fibre Length, in (mm)</b>	<b>Lubrication</b>
Denka Alcen	B97T4	<99.5	4 - 6 (102 - 152)	No

Thermal Ceramics Denka Alcen bulk fibres packaged out of Augusta are in cartons and stretch-wrapped onto pallets. Standard packaging is 22lb (10kg) cartons. Please check with your Thermal Ceramics office for current lead times and availability.

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