Kaowool® Moldables

Product Data Sheet

Product Description

Kaowool Moldables are pliable, low-shrinkage, putty-like materials made from ceramic fibers, organic polymers, inorganic binders, and proprietary ingredients. Supplied wet and premixed, they offer smooth texture and enhanced flowability, making them suitable for thin sections and easy application through a caulking apparatus. Kaowool Moldable AR is specifically designed to be strong, hard, and non-wetting to molten aluminum, making it ideal for use in troughs and launders.

Aluminum Resistant Cup test

Features

- Pliable, putty-like materials
- Installation ready
- Suited for use as a high temperature caulking, sealing, and finishing product

Applications

- Reheat Furnaces
- Forge Furnaces
- Heat-treating
- Annealing furnaces
- Kilns

Availability

Products	1 gallon pail	5 gallon pail	11 oz caulking tube	32 oz caulking tuber
Kaowool Moldable	x	x	x	x
Kaowool Moldable AR	x	x	x	x

Product Name	Kaowool Moldable	Kaowool Moldable AR
Fiber Class	RCF	RCF
Material Grade	Moldable	Moldable
Physical Properties		
Color	light brown	light brown
Continuous Use Temperature, °F	1900	1800
Continuous Use Temperature, °C	1038	982
Classification Temperature, °F	2000	1800
Classification Temperature, °C	1093	982
Density, dried @ 230 °F, pcf	28-30	55-60
Density, dried @ 110 °C, kg/m3	448-480	881-962
Density, wet, pcf	70-75	100-105
Density, wet, kg/rn3	1121-1201	1602-1683
Shelf life, months	12	6

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Product Name	Kaowool Moldable	Kaowool Moldable AR
Aluminum Resistant cup test		
1500 °F (816 0 C), 707.5 alloy, 72 hours	No penetration	No penetration
Modulus of Rupture, MOR, dried, psi		
230°F	-	438
1000°F	-	434
1500°F	-	442
1800°F	-	465
Modulus of Rupture, MOR, dried, MPa		
110°C	-	3.02
538°C	-	2.99
816°C	-	3.05
9820C	-	3.21
Compressive strength @ 5% deformation, dried, psi		
230°F	-	300
1000°F	-	300
1500°F	-	300
1800°F	-	300
Comressive strength @ 5% deformation, dried, MPa		
110°C	-	2.07
538°C	-	2.07
816°C	-	2.07
982°C	-	2.07
Permanent Linear Shrinkage, %, 24 hours		
230°F (110°C)	-	-1
500°F (260°C)	-	-1 .5
1000°F (538°C)	-0.1	-2.3
1500°F (816°C)	-0.2	-2.3
1800°F (982°C)	-	-3.1
2000°F (1093°C)	-2.7	-
Chemical Analysis, % weight basis after firing		
Alumina, Al2O3	26-30	29-32
Silica, SiO2	67-72	64-67
Other	1-2	3-5
Thermal Conductivity,• • BTU.in/hr.ft2, per ASTM C201		
500°F	0.5	0.7
1000°F	0.7	1
1500°F	1	1 .3
Thermal Conductivity, Wim.K, per ASTM C201		
260°C	0.07	1
538°C	0.1	0.14
816°C	0.14	0.19

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