ALUMINA-SILICA MOLDABLE BLANKETS

RS-C and RS-CH

ZIRCAR Alumina-Silica Moldable Blankets Type RS-C Moldable are composed of long, high strength ceramic fibers, with an inorganic alumina binder/rigidizing agent. They are wet blankets that are shipped rolled up and sealed in a plastic bag to preserve their moldability.

When dried, these moldable blankets form a strong, rigid, low density insulation. **Type RS-C Moldable** is ideal for applications to **1260°C (2300°F) and Type RS- CH** for applications to **1450°C (2642°F).** They are 100% inorganic, non-combustible and will not smoke upon initial heat up. They are ideal for insulation of complex shapes and can be cut to any size with a knife, scissors, or steel rule die.

These moldable blankets possess excellent strength for ease of installation. A unique process of locking in the binder ensures that it will not migrate. The result is a uniform homogenous structure throughout the entire material. They exhibit excellent erosion resistance under conditions of high, hot gas velocity or molten non-ferrous metal flow. They can be further rigidized by using ZIRCAR Alumina Coat. However, Type RS-C and RS-CH Moldables do not adhere to themselves. They can be cemented using ZIRCAR's RS-Cemcoat

They will normally air dry in 24 to 48 hours, with all the properties of a pre-fired insulation. Curing can be accomplished with a hot air gun or torch, or by immediate temperature exposure in the application.

SUGGESTED APPLICATIONS

- Hot gas duct, stack and flue liners
- Custom molded valve enclosures
- Small appliance insulation
- Hot-face insulation where gas velocity is of concern
- Liners and back-up insulation for molten metal transport troughs
- High temperature pipe insulation – internal and external
- Combustion chamber liners
- Self-supporting mold wraps
- Custom fabricated insulation parts
- Exhaust manifold insulation
- Asbestos lagging replacement

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MOLDABLE BLANKETS

CHARACTERISTICS & PROPERTIES

Type	RS-C
Typical Composition, %	
Al_2O_3	66
SiO_2	34
Other Oxides	0
Density, g/cc(pcf)	0.46(29)
Solid Content, % by weight	-
Maximum Use Temp.*, C(F)	1260(2300)
Melting Temp, C(F)	1900(3452)
Modulus of Rupture**, MPa(psi)	
as received and dried	0.5(78)
after 24 hrs at 1010°C(1850°F)	
Compressive Strength**, MPa (psi) @ 10% compression	0.2(30)
Linear Shrinkage‡, %	
Drying length & width/thickness	0/0
After 24 hrs at 800^0C(1472^0F)	-
After 24 hrs at 1200^0C(2200^0F)	-
Thermal Conductivity**, W/m K(BTU/hr. ft ^{0}F/in)	
500^0C (932^0F)	0.13(0.91)

* Max. use temperature is dependent on variables such as stresses, both thermal and mechanical, and the chemical environment that the material experiences.
** Properties expressed parallel to thickness.
‡ Properties expressed perpendicular to thickness.

AVAILABILITY

These products are available in custom sizes only. Please contact us for more information regarding available dimensions.

Note: These products can be further processed to provide finished sizes. Processes such as slitting, cutting, die punching and CNC machining are available upon request. Larger sizes are available.

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