



## Soluble Fiber Moldable Type SF Moldable

### General Information

ZIRCAR Ceramics' Soluble Fiber Moldable Type SF Moldable is a combination of low bio persistence high temperature fibers blended into a sticky, water-based refractory binder. SF Moldable is a wet doughy paste that exhibits excellent adhesion to a wide range of refractory materials. After placement, driving off its water base cures SF Moldable.

SF Moldable is a useful NON-RCF alternative to RCF fiber containing moldables. Similar in dried hardness to RCF moldables, SF Moldable can be effective as a hard surface coating on low-density high-temperature materials including insulating firebrick, ceramic fiber board and foams as well as ceramic fiber blankets. SF can be used in the assembly, construction and repair of molten non-ferrous metal transport components.

SF can also be a very effective bonding cement on low-density soluble fiber insulation materials such as ZIRCAR Ceramics' UNIFORM B1 Soluble fiber boards or microporous silica materials.

SF-Moldable has a shelf life of approximately 6 months and should not be allowed to dry out or freeze.



### Characteristics & Properties

Nominal Composition, wt.% Solids	44.25
Dry Density, g/cc (pcf)	0.64 (40)
Maximum Use Temperature*, °C (°F)	1000 (1832)
Color	White
Thermal Conductivity, ** Wm°K (BTU-in/ft² hr °F) , estimate	
204°C (400°F)	0.066 (0.46)
427°C (800°F)	0.110 (0.76)
649°C (1200°F)	0.148 (1.02)
871°C (1600°F)	0.177 (1.22)
Shrinkage, % after 1 hr at 750°C (1382°F), Ave L x W x T	<1.0
Loss on Ignition, %	4.6

The data presented herein is intended to help the user to determine the appropriateness of this material for their application.

This data is a nominal representation of this product's properties and characteristics and therefore should not be used in preparing specifications.

\* Maximum use temperature is dependent on variables such as stresses, both thermal and mechanical, and the chemical environment that the material experiences.

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Technical Data Bulletin

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[www.zircarceramics.com](http://www.zircarceramics.com)

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## Suggested Applications

Bonding of low-density, porous, high-temperature materials soluble fiber in applications with temperatures to 1000°C (1832°F).

Coating surfaces of low-density boards, blankets and papers for improved hardness, and resistance to abrasion and chemical attack.

Repairing cracks and openings in furnace walls made of fibrous ceramic material and insulating firebrick.

Molding of shapes (rigid tubes, boats, setters, supports, process fixtures, molten non-ferrous metal transport parts etc.)

## Availability of Standard SF Moldable

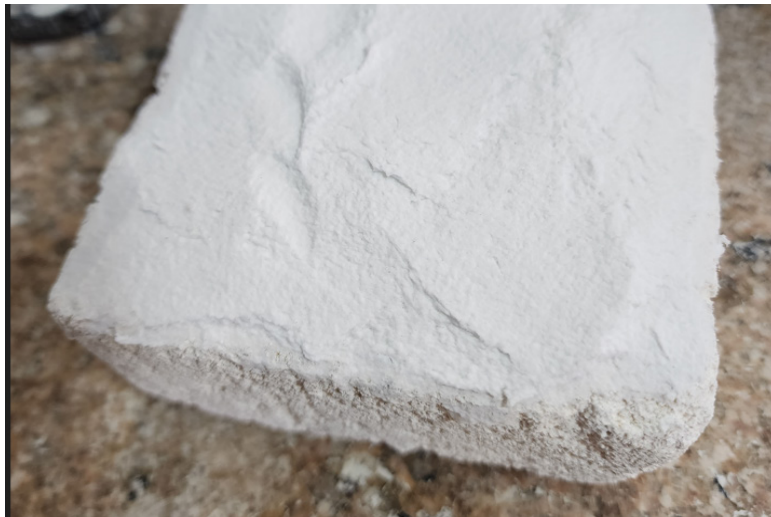
ITEM #	DESCRIPTION
A48-01	SF MOLDABLE, 1 GAL

## To Order

**Standard moldable:** In order to ensure maximum freshness and product quality **SF Moldable is made to order** and usually ships within 10 business days of order. Order online or contact ZIRCAR Ceramics' Sales department and specify quantity, item # and description.

## Use Instructions

When applying SF Moldable as a coating or when building linings or monolithic structures, best results are obtained when product is applied in thin layers (up to 1/2in. thick) and at room temperature. This ensures maximum adhesion and accommodates drying shrinkage. Non-porous mold materials should be used when making shapes. Once placed, the material should be allowed to dry prior to applying the next layer. It can be air-dried or dried with an electric heating device or low gas flame. Drying time is dependent upon material thickness and exposed surface area. Material must be thoroughly dried before contact with any molten metal is made.



SF Moldable adheres well to rough surfaces such as Insulating firebrick, calcium silicate boards and soluble fiber boards, shapes and blankets.



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