

## Superwool® Pumpable

Datasheet Code US: 5-14-1014

### Product Description

Superwool Pumpable is composed of Superwool bulk fibers, organic polymers, inorganic binders and other proprietary ingredients. This product is a pliable, low shrinkage, putty-like material that is supplied wet and premixed, ready for installation. This product has been specially formulated to be pumped into areas where refractory and/or insulation has degraded and left voids in the lining system. It will readily flow to fill these voids and will provide a monolithic, inorganic insulating system that is resistant to thermal and mechanical breakdown.

### Features

- Pliable, putty-like material composed of low biopersistent fibers, proprietary ingredients and inorganic binders
- Ready to use
- Resistant to thermal and mechanical breakdown
- Non-wetted in molten aluminium

### Applications

- Molten aluminum launders
- Fibrous patching/back-up material
- Pumped to repair backup insulation in boilers (hot or cold)

### Installation

The HS-100 Extrusion Pump is a piston extrusion pump which has been modified to pump Kaowool® and Superwool pumpable materials in a fast, efficient manner. These modifications optimize the pump's capabilities to provide a complete delivery system.

## Superwool® Pumpable

Mastics Product Name	<u>Superwool Pumpable</u>
Fiber Class	<u>AES</u>
Material Grade	<u>Pumpable</u>
Physical Properties	
Color	off white
Continuous Use Temperature, °F	1900
Continuous Use Temperature, °C	1038
Classification Temperature, °F	2000
Classification Temperature, °C	1093
Density, dried @ 230°F, pcf	26
Denisty, dried @ 110°C, kg/m <sup>3</sup>	416
Density, wet, pcf	75
Denisty, wet, kg/m <sup>3</sup>	1201
Yield, cubic ft / gal	0.13
Yield, cubic m / L	0.004
Shelf life, months	12

### Availability

<u>Products</u>	<u>5 gallon pail</u>
Superwool Pumpable	X

Mastics Product Name	<u>Superwool Pumpable</u>
Chemical Analysis, % weight basis after firing	
Alumina, Al <sub>2</sub> O <sub>3</sub>	5
Silica, SiO <sub>2</sub>	64
Calcium oxide + Magnesium oxide, CaO + MgO	29
Other	2

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## Superwool® Pumpable

Mastics Product Name	Superwool Pumpable
Modulus of Rupture, MOR, dried, psi	
230°F	84
1200°F	85
1500°F	131
1800°F	192
Modulus of Rupture, MOR, dried, MPa	
110°C	0.58
649°C	0.59
816°C	0.9
982°C	1.32
Compressive strength @ 5% deformation, dried, psi	
230°F	78
1200°F	37
1500°F	38
1800°F	68
Compressive strength @ 5% deformation, dried, MPa	
110°C	0.54
649°C	0.26
816°C	0.26
982°C	0.47
Compressive strength @ 10% deformation, dried, psi	
230°F	92
1200°F	56
1500°F	83
1800°F	142
Compressive strength @ 10% deformation, dried, MPa	
110°C	0.63
649°C	0.39
816°C	0.57
982°C	0.98
Permanent Linear Shrinkage, %, 24 hours	
1200°F (684°C)	-0.3
1500°F (816°C)	-1.7
1800°F (982°C)	-1.7
2000°F (1093°C)	-2

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