

# Superwool<sup>®</sup> Prime Sealcoat

## Product Data Sheet



### Product Description

Superwool Prime Sealcoat insulation is composed of our newest Superwool Prime, low biopersistent fiber, 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 by a pneumatically applied system. The product is designed to seal furnace lining cracks and can be used as a hot face coating over fiber insulation and other refractory surfaces to restore and improve lining performance.

### Installation Information

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

The Sealcoat Spray Nozzle assembly is designed to work in conjunction with the HS-100 Extrusion pump. The combined system allows for an efficient wet gunning technology. Sealcoat can also be applied by trowel or caulking gun.

### 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 aluminum

### Applications

- Grout refractory joints and gaps
- Hot face coating over fiber or dense refractory
- Seals furnace lining cracks
- Back-up lining
- Furnace maintenance and emergency repairs

### Shelf Life

- Shelf life for Superwool Prime Sealcoat is 24 months and is calculated from date of manufacture noted on label.

### Standard Packaging Availability

- Superwool Prime Sealcoat is manufactured in the United States. Please contact your regional Morgan Advanced Materials - Thermal Ceramics representative for your local business needs.

11oz caulking tube	32oz caulking tube	1 gallon pail	5 gallon pail
X	X	X	X

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Properties		Superwool Prime Sealcoat
Color		off white
Continuous Use Temperature, °C (°F)		1538 (2800)
Classification Temperature, °C (°F)		1593 (2900)
Density, dried @ 110°C (230°F), kg/m <sup>3</sup> (pcf)		720 - 800 (45 - 50)
Density, wet, kg/m <sup>3</sup> (pcf)		1550 (97)
Solids, %		51
Yield, m <sup>3</sup> /l (ft <sup>3</sup> /gal)		0.001 (0.13)
Aluminum Resistant Cup Test, 816°C (1500°F), 7075 alloy, 72 hours		No Penetration
<b>Modulus of Rupture, MPa (psi)</b>		
	dried	0.54 (78)
	1093°C (2000°F)	1.14 (165)
	1315°C (2400°F)	1.62 (235)
	1427°C (2600°F)	1.23 (178)
	1538°C (2800°F)	0.30 (44)
<b>Compressive strength, MPa (psi), 10% deformation</b>		
	dried	1.01 (146)
	fired, 1093°C (2000°F)	1.74 (252)
	fired, 1315°C (2400°F)	2.24 (325)
	fired, 1427°C (2600°F)	1.19 (172)
	fired, 1538°C (2800°F)	0.35 (51)
<b>Permanent Linear Shrinkage, %, 24 hours</b>		
	2000°F (1093°C)	1.4
	2400°F (1316°C)	1.7
	2600°F (1426°C)	1.4
	2800°F (1538°C)	1.0
<b>Chemical Analysis, %</b>		
	Silica, SiO <sub>2</sub>	87
	Calcium oxide, CaO	12
	Other	1
<b>Thermal Conductivity, W/m•K, per ASTM C201</b>		
	200°C	0.12
	400°C	0.14
	600°C	0.18
	800°C	0.23
	1000°C	0.30
	1200°C	0.38
	1400°C	0.49
<b>Thermal Conductivity, BTU•in/hr•ft<sup>2</sup>•°F, per ASTM C201</b>		
	500°F	0.9
	1000°F	1.1
	1500°F	1.6
	2000°F	2.3
	2500°F	3.3

Whilst the values and application information in this datasheet 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.