Superwool® Sealcoat™ HT

Product Description

Superwool Sealcoat HT insulation is composed of Superwool HT, a low bio-persistent 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.

Aluminum Resistant Cup Test

7075 alloy, 1500°F (816°C), 72 hours -
no penetration

Features

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

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

Installation

The HS-100 Extrusion pump is a piston extrusion pump which has been modified to pump Superwool Sealcoat HT 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.

Availability

Products	1 gallon pail	5 gallon pail	11 oz caulking tube	32 oz caulking tuber
Superwool Sealcoat HT	X	X	X	X

Superwool® Sealcoat™ HT

Mastics Product Name	Superwool Sealcoat HT
Fiber Class	AES
Material Grade	Coating
Physical Properties	
Color	off white
Continuous Use Temperature, °F	2800
Continuous Use Temperature, °C	1538
Classification Temperature, °F	2900
Classification Temperature, °C	1593
Density, dried @ 230°F, pcf	32-36
Denisty, dried @ 110°C, kg/m^3	513-577
Density, wet, pcf	75
Denisty, wet, kg/m^3	1201
Yield, cubic ft / gal	0.13
Yield, cubic m / L	0.004
Solids, %	46
Shelf life, months	12
Aluminum Resistant cup test	
1500°F (816°C), 707.5 alloy, 72 hours	No penetration
Modulus of Rupture, MOR, dried, psi	
230°F	200
2400°F	210
Modulus of Rupture, MOR, dried, MPa	
110°C	1.38
1315°C	1.45
Compressive strength @ 10% deformation, dried, psi	
230°F	150
Compressive strength @ 10% deformation, dried, MPa	
110°C	1.04
Compressive strength @ 10% deformation, fired, psi	
2000°F	225
2400°F	230
Compressive strength @ 10% deformation, fired, MPa	
1093°C	1.55
1315°C	1.59

Superwool® Sealcoat™ HT

Mastics Product Name	Superwool Sealcoat HT
Permanent Linear Shrinkage, %, 24 hours	
2000°F (1093°C)	-1.4
2400°F (1316°C)	-1.4
2600°F (1426°C)	-1.5
2800°F (1538°C)	-1.6
Chemical Analysis, % weight basis after firing	
Silica, SiO_2	86
Calcium oxide, CaO	12
Other	2
Thermal Conductivity, BTU•in/hr•ft², per ASTM C201	
500°F	0.8
1000°F	1
1500°F	1.4
2000°F	2
Thermal Conductivity, W/m•K, per ASTM C201	
260°C	0.11
538°C	0.14
816°C	0.2
1093°C	0.29