

## Stellar Canada CERAMITE® SFR Wear Resistant Castable

Category: Ceramic, Oxide, Silicon Oxide

## **Material Notes:**

Ceramite is a family of wear resistant castables with a unique combination of high wear resistance, thermal resistance and mechanical strength. Ceramite is produced and supplied to end users world wide, both as mortars and as various precast components. Ceramite can easily be mixed, cast and shaped in any size and is thus comfortably to work with in-situ. Ceramite can be used in within a wide range of temperatures and applications exposed to thermal shock conditions in industries like for example aluminum, cement and ferro. Applications: Floor Tile, Hearth/Furnace Tile, Furnace Sills & Doors, Lintels, Pipe and Duct Linings, Feed Tubes, Troughs/Launders, Ladles, Dampers, Nozzle Blasters, Crucible Linings, Vortex, Burner Tip Cooler Plates, Nose Ring, Electrical Insulation, Cold Wear Areas Specific Notes on This Grade: A castable combining good mechanical and thermal properties. Extremely low thermal expansion. Mainly used in aluminum and zinc industries. References al launders, crucibles and other areas in contact with molten metal. Information provided by Stellar Canada.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Stellar-Canada-CERAMITE-SFR-Wear-Resistant-Castable.php

Physical Properties	Metric	English	Comments
Bulk Density	2.07 g/cc	0.0747 lb/in³	As Placed
Porosity	10.4 %	10.4 %	Apparent

Mechanical Properties	Metric	English	Comments
Modulus of Rupture	0.008998 GPa	1.305 ksi	Hot, prefired at 1832°F/24 hours (1000°C)
	3.98 MPa	577 psi	
Flexural Strength	@Temperature 1000 °C	@Temperature 1832 °F	after Firing; ASTM-349
	5.27 MPa	764 psi	
	@Temperature 850.0 °C	@Temperature 1562 °F	after Firing; ASTM-349
	6.20 MPa	899 psi	after Firing; ASTM-349
	@Temperature 500 °C	@Temperature 932 °F	
Compressive Strength	108.00 MPa	15664 psi	Cold Crushing after 1560°F
	80.234 MPa	11637 psi	
	@Temperature 1000 °C	@Temperature 1830 °F	after Firing; ASTM C-349
	92.190 MPa	13371 psi	after Firing; ASTM C-349
	@Temperature 850 °C	@Temperature 1560 °F	



Mechanical Properties	Metric MPa	English 13002 psi	Comments
	@Temperature 20.0 °C	@Temperature 68.0 °F	after 7 days
	112.89 MPa	16374 psi	after Firing; ASTM C-349
	@Temperature 500 °C	@Temperature 932 °F	

Thermal Properties	Metric	English	Comments
Thermal Conductivity	1.02 W/m-K	7.07 BTU-in/hr-ft²- °F	
	@Temperature 300 °C	@Temperature 572 °F	
	1.25 W/m-K	8.67 BTU-in/hr-ft²- °F	
	@Temperature 600.0 °C	@Temperature 1112 °F	
	1.458 W/m-K	10.12 BTU-in/hr-ft²- °F	
	@Temperature 900.0 °C	@Temperature 1652 °F	
Maximum Service Temperature, Air	999 °C	1830 °F	

Component Elements Properties	Metric	English	Comments
Al203	21 %	21 %	
CaO	6.3 %	6.3 %	
Fe203	0.070 %	0.070 %	
K20	0.020 %	0.020 %	
MgO	0.010 %	0.010 %	
Na2O	0.030 %	0.030 %	
SiO2	73 %	73 %	

Descriptive Properties	Value	Comments
Application	Prefired	Precast Shapes

## **Contact Songhan Plastic Technology Co.,Ltd.**

Website: www.lookpolymers.com Email: sales@lookpolymers.com



Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China