Technical Data Sheet

Ceramite® SFR

Superior Performance in Wear Resistant Applications

Chemical analysis (%) :

SiO_2	Al_2O_3	CaO	Fe_2O_3
77	15	7	0.1

Maximum service temperature: 1832°F (1000°C)

Maximum grain size: 0.20" (5 mm)

Density:

after curing	68°F (20°C)	131.1 lbs./cu.ft.	(2.1 kg/dm^3)
after firing	1562°F (850°C)	124.9 lbs./cu.ft.	(2.0 kg/dm^3)

Linear thermal expansion: 68°F – 1562°F (20°C – 850°C) 0.07% / $9.0 \cdot 10^{-6}$/°C

Permanent linear change: 68°F – 1562°F (20°C – 850°C) -0.4%

Thermal conductivity:[1]

572°F (300°C)	6.93 BTU-in/hr-ft²-°F	(1.0 W/m·K)
1112°F (600°C)	9.01 BTU-in/hr-ft²-°F	(1.3 W/m·K)
1652°F (900°C)	10.40 BTU-in/hr-ft²-°F	(1.5 W/m·K)

Temperature	68°F (20°C)	932°F (500°C)	1562°F (850°C)	1832°F (1000°C)
Cold compressive strength[2]	13,779 psi (95 MPa)	14,504 psi (100 MPa)	14,504 psi (100 MPa)	10,153 psi (70 MPa)
Cold flexural strength[3]	1,450 psi (10 MPa)	1,450 psi (10 MPa)	870 psi (6 MPa)	725 psi (5 MPa)
Abrasion test[4]	0.13" (3.3 mm)	0.11" (2.9 mm)		
Hot modulus of rupture				870 psi (6 MPa)

Water addition: 6.5 – 7.0 weight %
Installation: Vibration
Packing: 55 lbs. or 440 lbs. (25 kg or 200 kg)
Shelf life:[5] 6 months

All data are average numbers and are not to be considered as specifications.

[1] ISO 88941
[2] ASTM C349, The sample is prefired at given temperature.
[3] ASTM C348, The sample is prefired at given temperature.
[4] DIN 52108, The sample is prefired at given temperature.
[5] Ceramite is to be stored in dry conditions, off the ground. In this case, it will retain its properties for at least 6 months. In many cases, experience has demonstrated that properties are retained for more than a year.

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