

Technical Data Sheet

Ceramite[®] CSA

Superior Performance in Wear Resistant Applications

Chemical analysis (%) :

SiC	Al ₂ O ₃	SiO ₂	CaO	Fe ₂ O ₃
75	10	10	2	< 0.1

Maximum service temperature: 2732°F (1500°C)

Maximum grain size: 0.16" (4 mm)

Density:
 after curing 68°F (20°C) 174.8 lbs./cu.ft. (2.8 kg/dm³)
 after firing 1562°F (850°C) 162.3 lbs./cu.ft. (2.6 kg/dm³)

Linear thermal expansion: 68°F – 1562°F (20°C – 850°C) 0.4% /4.4·10⁻⁶/°C

Permanent linear change: 68°F – 1562°F (20°C – 850°C) -0.3%

Thermal conductivity:¹
 572°F (300°C) 97.07 BTU-in/hr-ft²-°F (14 W/m·K)
 1112°F (600°C) 83.20 BTU-in/hr-ft²-°F (12 W/m·K)

Temperature	68°F (20°C)	1562°F (850°C)	1832°F (1000°C)	2192°F (1200°C)	2732°F (1500°C)
Cold compressive strength²	13,779 psi (95 MPa)	24,656 psi (170 MPa)	16,679 psi (115 MPa)	20,305 psi (140 MPa)	16,969 psi (117 MPa)
Cold flexural strength³	1,450 psi (10 MPa)	3,336 psi (23 MPa)	3,626 psi (25 MPa)	4,641 psi (32 MPa)	4,931 psi (34 MPa)
Abrasion test⁴		932°F (500°C) 0.008" (0.2 mm)			
Hot modulus of rupture			> 4,061 psi (> 28 MPa)		

Water addition: 4.5 – 4.8 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.

¹ISO 88941

²ASTM C349, The sample is pre-fired at given temperature.

³ASTM C348, The sample is pre-fired at given temperature.

⁴DIN 52108, The sample is pre-fired at given temperature.

⁵Ceramite 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.