



# PRODUCT DATA

**Brand Name:**

**SAKONITE®**

**Description:**

SAKONITE® is a very economical refractory concrete. It is widely used for cast floors exposed to molten metals or hot ingots. It can be cast and finished like ordinary concrete.

For conventional gunning, SAKONITE® is also available as GC SAKONITE® gun mix.

**Physical properties shown are average values of samples taken under controlled conditions  
ASTM test methods used where applicable**

**Maximum Service Temperature:** 2200°F (1204°C)

**Dry Material Required per Cubic Foot :** 121 - 127 lbs. (approximate)

**Typical Water Required for Mixing (by weight) :** 13%

**Bulk Density (pcf)**

After 220°F (104°C)	122 - 129	(1.95 - 2.07 g/cm <sup>3</sup> )
After 1500°F (815°C)	121 - 127	(1.94 - 2.03 g/cm <sup>3</sup> )
After 2000°F (1093°C)	120 - 126	(1.92 - 2.02 g/cm <sup>3</sup> )

**Cold Crushing Strength (psi)**

After 220°F (104°C)	4000 - 6000	(280 - 420 kg/cm <sup>2</sup> )
After 1500°F (815°C)	1000 - 2000	(70 - 140 kg/cm <sup>2</sup> )
After 2000°F (1093°C)	800 - 1800	(56 - 126 kg/cm <sup>2</sup> )

**Modulus of Rupture (psi)**

After 220°F (104°C)	1000 - 1500	(70 - 105 kg/cm <sup>2</sup> )
After 2000°F (1093°C)	200 - 400	(14 - 28 kg/cm <sup>2</sup> )

**Permanent Linear Change (%)**

After 1500°F (815°C)	-0.1 to +0.7
After 2000°F (1093°C)	-0.3 to -0.9

**Thermal Conductivity (K Factor)**

Mean Temperature	BTU/ft <sup>2</sup> /hr./°F/inch	W/mK
1500°F (815°C)	6.0	0.86
2000°F (1093°C)	6.1	0.88

**Typical Chemical Analysis (%)**

(Calcined Basis)

Alumina (Al <sub>2</sub> O <sub>3</sub> ) .....	33.7
Silica (SiO <sub>2</sub> ) .....	45.9
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> ) .....	1.1
Titania (TiO <sub>2</sub> ) .....	1.7
Lime (CaO) .....	16.0
Magnesia (MgO) .....	0.6
Alkalis (Na <sub>2</sub> O+K <sub>2</sub> O) .....	1.0

Brand Code: 1066

The properties shown on this data sheet represent typical average results using standard ASTM test methods (unless otherwise noted) conducted under controlled condition (using standard rectangular shapes), and should not be considered to be guaranteed specifications. Properties are subject to normal manufacturing statistical standard deviation ranges, and Resco Products, Inc. reserves the right to modify the properties and specifications at any time without prior notice.

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