



# PRODUCT DATA

**Brand Name:**

## PROGUN® LC 80SCG

**Description:** ProGun LC 80SCG is an 80% SiC castable that uses low cement binder technology with the gunite installation method. Its low porosity, excellent abrasion resistance and high heat transfer value make this product an excellent choice for the tube walls in the combustion zones of power generating units. The high heat transfer characteristic of the SiC reduces surface slagging and alkali build-up, thereby, improving the operating efficiency of your unit. **A water booster pump is recommended for proper installation.**

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

**Maximum Service Temperature: 2800°F (1540°C)**

**Bulk Density (pcf)**

	Gun Data	
After 220°F (104°C)	147 - 152	(2.35 - 2.43 g/cm <sup>3</sup> )
After 1700°F (927°C)	143 - 148	(2.29 - 2.37 g/cm <sup>3</sup> )

**Cold Crushing Strength (psi)**

After 1700°F (927°C)	8000 - 11000	(560 - 770 kg/cm <sup>2</sup> )
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**Modulus of Rupture (psi)**

After 1700°F (927°C)	2000 - 3000	(140 - 210 kg/cm <sup>2</sup> )
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**Thermal Conductivity (K Factor)**

Mean Temperature	BTU/ft <sup>2</sup> /hr./°F/inch	W/mK
1000°F (540°C)	66	9.52
1500°F (815°C)	73	10.53

**Permanent Linear Change (%)**

After 1700°F (927°C)	-0.4 to -0.1
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**Abrasion Loss (using ASTM C-704 Method)**

After 1700°F (927°C)	Less than 10 cc
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**Typical Chemical Analysis (%)**

(Calcined Basis)

Silicon Carbide (SiC) .....	79.8
Alumina (Al <sub>2</sub> O <sub>3</sub> ) .....	8.7
Silica (SiO <sub>2</sub> ) .....	9.2
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> ) .....	0.2
Titania (TiO <sub>2</sub> ) .....	Trace
Lime (CaO) .....	2.0
Alkalies (Na <sub>2</sub> O+K <sub>2</sub> O) .....	0.1

**Standard Packaging:** 55 lb bag. 72 bags per pallet. Bulk packaging available.

Brand Code: 0406

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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