

Plibrico Company, LLC 1935 Techny Road - Unit 16 Northbrook, IL 60062 (312) 337-9000 www.plibrico.com

Technical Data Sheet Redline Redgun 70A

Product # 52402

Available Internationally As:

Redline Redgun 70A

Product Description:

A high purity mullite based gun material that exhibits good thermal shock resistance and volume stability. It contains a nonwetting additive system that makes it resistant to molten aluminum. Applications include resurfacing aluminum furnace walls (upper and lower), and in some cases, complete wall thicknesses.

| Standard Packaging: | 55 # / | 25 <i>kg</i> Bag |
|----------------------------|---------|------------------|
| Shelf Life: | 9 month | S |
| Service Limit: | 3100 °F | 1700 °C |
| Contact Limit: | 1700 °F | |
| Bulk Density - In Service: | 141 pcf | 2259 kg/m³ |
| Bulk Density - To Place: | 141 pcf | 2259 kg/m³ |

Minimum Time To Firing: 24 hr

| Water Range Per Standard Package | | % | Quarts | Liters | |
|-------------------------------------|-----|---|--------|--------|--|
| Vib | min | | | | |
| Casting | max | | | | |
| Casting | min | | | | |
| | max | | | | |
| Pumping | min | | | | |
| | max | | | | |

Abrasion Loss after 1500°F / 815°C per ASTM C704

N/A cc

| Chemistry (calcined) % | | | | | | |
|--------------------------------|------|------------------|-----|------------------|-----|--|
| Al ₂ O ₃ | 66.1 | Alk | 0.3 | MgO | 0.1 | |
| SiO ₂ | 29.3 | TiO ₂ | 0.2 | ZrO ₂ | | |
| CaO | 1.8 | P_2O_5 | | Other | | |
| Fe ₂ O ₃ | 1.2 | SiC | | | | |

| Coefficient of Thermal Expansion (reversable): | | | | | |
|---|-------------------------------|-------|--|--|--|
| x 10 ⁻⁶ in/in/°F / x 10 ⁻⁶ mm/mm/°C | | | | | |
| Thermal Conductivity | btu*in/hr*ft ² *°F | W/m°C | | | |
| 500°F / 260°C | 4.8 | 0.69 | | | |

| 500°F / <i>260</i> °C | 4.8 | 0.69 |
|-------------------------|-----|------|
| 1000°F / <i>540</i> °C | 5.7 | 0.82 |
| 1500°F / <i>815</i> °C | 7.0 | 1.01 |
| 2000°F / <i>1090</i> °C | | |

| Tempe | Temperature Linear | | | CCS per ASTM C133 | | Cold MOR per ASTM C133 | | Hot MOR per ASTM C583 | |
|---------|--------------------|--------------------------|-----|----------------------|------|---------------------------|-----|--------------------------|--|
| °F | °C | Change% per ASTM C113 | psi | MPa | psi | MPa | psi | MPa | |
| 250 | 120 | 0.0 | | | 700 | 4.8 | | | |
| 1000 | 540 | -0.2 | | | 870 | 6.0 | | | |
| 1500 | 820 | -0.3 | | | 1140 | 7.9 | | | |
| 2500 | 1370 | 0.6 | | | 1600 | 11.0 | | | |
| 3000 | 1650 | 1.3 | | | 2310 | 15.9 | | | |
| Other D | ata: | | | | | | | | |

Release Date: 1 Nov 1999

Refractory material should be stored in a cool, dry environment.

Note: All data are averaged results of ASTM tests (where applicable) on laboratory specimens. Reasonable variations in data can be expected. Data is not to be used for specification purposes. Product data is periodically updated to reflect product, raw material, process and/or testing changes. Please consult your Plibrico representative to make sure you have the most current data.

Heat Up Guide: Redline Schedule 3

ASTM Class: C 401 Class F Regular Castable

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