

Technical Data Sheet

Redline Redflow 65A

Product # 52212

Available Internationally As:

Redline Redflow 65A

Product Description:

This mullite based castable exhibits excellent flow properties and is extremely user friendly. Designed for applications where molten aluminum processing operations require exceptional strength and abrasion resistance. Applications include problem wear areas such as sills and ramps in aluminum melting and holding furnaces, troughs, and degas boxes. The material provides excellent non-wetting properties and resistance to metal penetration.

Standard Packaging:

55 # / 25 kg Bag

Abrasion Loss after 1500°F / 815°C

per ASTM C704

N/A cc

Shelf Life:

6 months

Service Limit:

3100°F

1700°C

Contact Limit:

1700 °F

927 °C

Bulk Density - In Service:

164 pcf

2627 kg/m³

Bulk Density - To Place:

164 pcf

2627 kg/m³

Minimum Time To Firing:

24 hr

| Water Range Per Standard Package | | % | Quarts | Liters |
|-------------------------------------|-----|-----|--------|--------|
| Vib Casting | min | 4.8 | 1.3 | 1.2 |
| | max | | | |
| | min | 4.8 | 1.3 | 1.2 |
| Casting | max | | | |
| Pumping | min | | | |
| | max | | | |

| Chemistry (calcined) % | | | | | | |
|--------------------------------|------|-------------------------------|-----|------------------|-----|--|
| Al ₂ O ₃ | 65.4 | Alk | 0.2 | MgO | 0.1 | |
| SiO ₂ | 30.2 | TiO ₂ | 1.2 | ZrO ₂ | | |
| CaO | 1.8 | P ₂ O ₅ | | Other | | |
| Fe ₂ O ₃ | 0.9 | SiC | | | | |

| Coefficient of Thermal Expansion (reversable): | | | |
|--|-----------------------------|--|--|
| x 10 ⁻⁶ in/in/°F / | x 10 ⁻⁶ mm/mm/°C | | |

| Thermal Conductivity | btu*in/hr*ft²*°F | W/m°C | |
|-------------------------|------------------|-------|--|
| 500°F / 260°C | 11.2 | 1.61 | |
| 1000°F / <i>540</i> °C | 11.5 | 1.66 | |
| 1500°F / <i>815</i> °C | 12.1 | 1.74 | |
| 2000°F / 1090°C | 12.9 | 1.86 | |

| 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 | 9000 | 62.0 | 2390 | 16.5 | | |
| 1000 | 540 | -0.1 | | | 3260 | 22.5 | | |
| 1500 | 820 | -0.2 | 14400 | 99.3 | 4370 | 30.1 | | |
| 2000 | 1090 | -0.2 | | | 5495 | 37.9 | | |
| 3000 | 1650 | -0.1 | | | 5780 | 39.9 | | |

Other Data:

Release Date: 1 Aug 2016

Heat Up Guide: Redline Schedule 1

ASTM Class: C 401 Class F

Low Cement Castable

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.