



Plibrico Company, LLC

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Technical Data Sheet

Plistix SR-68

Product # 17704

Available Internationally As:

Plico Stix SR-68

Product Description:

A 70% alumina, mullite based, phosphate bonded, plaster type refractory servicing mix. Non wetting to aluminum alloys.

Standard Packaging: 50 # / 23 kg Pail

Shelf Life: 12 months

Service Limit: 3100 °F 1700 °C

Contact Limit: N/A °F N/A °C

Bulk Density - In Service: 145 pcf 2323 kg/m³

Bulk Density - To Place: 160 pcf 2563 kg/m³

Minimum Time To Firing: 0 hr

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

N/A cc

Chemistry (calcined) %

| | | | | | |
|--------------------------------|------|-------------------------------|-----|------------------|-----|
| Al ₂ O ₃ | 67.5 | Alk | 0.1 | MgO | 0.2 |
| SiO ₂ | 27.2 | TiO ₂ | 1.4 | ZrO ₂ | |
| CaO | 0.1 | P ₂ O ₅ | 2.8 | Other | |
| Fe ₂ O ₃ | 0.8 | SiC | | | |

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

Coefficient of Thermal Expansion (reversible):

3.7 x 10⁻⁶ in/in/°F / 6.7 x 10⁻⁶ mm/mm/°C

| Thermal Conductivity | btu*in/hr*ft ² *°F | W/m°C |
|----------------------|-------------------------------|-------|
| 500°F / 260°C | 8.1 | 1.17 |
| 1000°F / 540°C | 8.3 | 1.20 |
| 1500°F / 815°C | 9.1 | 1.31 |
| 2000°F / 1090°C | 10.5 | 1.51 |

| Temperature | | Linear Change% per ASTM C113 | CCS per ASTM C133 | | Cold MOR per ASTM C133 | | Hot MOR per ASTM C583 | |
|-------------|-----|---------------------------------|----------------------|-----|---------------------------|-----|--------------------------|-----|
| °F | °C | | psi | MPa | psi | MPa | psi | MPa |
| 230 | 110 | | 1250 | 9.0 | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Other Data: PREVENT MATERIAL FROM FREEZING: During cold weather this material must be shipped and stored in a warm place to prevent freezing. In warm weather, store in a cool dry place to prevent drying out.

Release Date: 1 Aug 2019

Heat Up Guide:

ASTM Class: C 673 70% Alumina

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.