



PRODUCT DATA

Brand Name: LADLELINE™

Description: LADLELINE™ is an economical, 3000°F, low-iron castable. It is volume stable with good strength throughout its temperature range. Although originally designed for casting ladles, LADLELINE™ has proven to be a good, general-purpose, high temperature castable for a wide variety of applications.

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

Maximum Service Temperature: 3000°F (1649°C)

Typical Water Required for Mixing (by weight) :

Vibration Casting 7 - 9%

Vibration Cast Data

Bulk Density (pcf)

| | | |
|-----------------------|-----------|----------------------------------|
| After 220°F (104°C) | 136 - 146 | (2.18 - 2.34 g/cm ³) |
| After 1500°F (815°C) | 135 - 143 | (2.16 - 2.29 g/cm ³) |
| After 2250°F (1232°C) | 134 - 142 | (2.15 - 2.27 g/cm ³) |

Cold Crushing Strength (psi)

| | | |
|-----------------------|-------------|---------------------------------|
| After 220°F (104°C) | 2000 - 4000 | (140 - 280 kg/cm ²) |
| After 1500°F (815°C) | 1200 - 3200 | (84 - 224 kg/cm ²) |
| After 2250°F (1232°C) | 2000 - 3500 | (140 - 245 kg/cm ²) |

Modulus of Rupture (psi)

| | | |
|-----------------------|-----------|-------------------------------|
| After 220°F (104°C) | 500 - 800 | (35 - 56 kg/cm ²) |
| After 1500°F (815°C) | 300 - 700 | (21 - 49 kg/cm ²) |
| After 2250°F (1232°C) | 500 - 900 | (35 - 63 kg/cm ²) |

Thermal Conductivity (K Factor)

| | BTU/ft ² /hr/°F/inch | W/mK |
|-----------------------|---------------------------------|------|
| After 1500°F (815°C) | 9.7 | 1.40 |
| After 2500°F (1371°C) | 10.3 | 1.48 |

Permanent Linear Change (%)

| | |
|-----------------------|--------------|
| After 1500°F (815°C) | -0.4 to 0.0 |
| After 2250°F (1232°C) | -0.5 to -0.1 |

Apparent Porosity (%)

| | |
|-----------------------|---------|
| After 1500°F (815°C) | 20 - 24 |
| After 2250°F (1232°C) | 20 - 24 |

Typical Chemical Analysis (%)

(Calcined Basis)

| | |
|--|------|
| Alumina (Al ₂ O ₃) | 56.2 |
| Silica (SiO ₂) | 36.4 |
| Lime (CaO) | 2.6 |
| Iron Oxide (Fe ₂ O ₃) | 1.2 |
| Titania (TiO ₂) | 2.4 |
| Magnesia (MgO) | 0.3 |
| Alkalis (Na ₂ O+K ₂ O) | 0.9 |

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

Brand Code: 0966

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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