

PRODUCT DATA



Insulating Castables

Cast Data

Brand Name: Rescocast 4LI

Description:

RESCOCAST 4LI, a low iron, high purity, lightweight insulating castable, is especially formulated for use in controlled atmospheres such as methane, hydrogen, and carbon monoxide. **RESCOCAST 4LI** has been used in many heater applications, such as pre-fabricated panels, resulting in minimum downtime. **RESCOCAST 4LI** can be installed by either gunning or casting methods.

Maximum Service Temperature 2600°F (1427°C)

Typical Water Content (%) 35.5
Typical Mix Time (minutes) 3

Bulk Density (pcf)

After 1500°F (815°C) 69 (1104 kg/m³)

Cold Crushing Strength (psi)

After 1500°F (815°C) 500 to 1000 (35-70 kg/cm²)

Permanent Linear Change (%)

Green to 1500°F (815°C) 0.0 to -0.4
230°F (110°C) to 1500°F (815°C) 0.0 to -0.3

Apparent Porosity, %

After 1000°F (540°C) 50%

Thermal Conductivity or "K" Factor

Mean Temperature	BTU/ft ² /Hr/°F/in.	W/mK
500°F (260°C)	2.7	0.39
1000°F (540°C)	2.3	0.33
1500°F (815°C)	2.6	0.38

Typical Chemical Analysis (%)

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	TiO ₂	CaO	MgO	Alkalies
44.1	40.2	1.0	0.9	11.9	0.2	1.7

Brand Code 0331, Shelf Life 12 Months

The properties shown on this data sheet represent typical average results generated using standard ASTM test methods (unless otherwise noted) conducted under controlled conditions (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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PRODUCT DATA



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Gunned Data

Brand Name: **Rescocast 4LI**

Data shown are the average results of tests following the guidelines set forth in ASTM C-903, "Preparing Refractory Castable Specimens by Cold Gunning." Results will vary subject to normal variations in manufacturing, testing, and installation procedures in the field.

Maximum Service Temperature	2600°F (1427°C)	
<u>Bulk Density (pcf)</u>		
After 1500°F (815°C) :	85	(1360 kg/m ³)
<u>Cold Crushing Strength (psi)</u>		
After 1500°F (815°C) :	600 to 1200	(42 to 84 kg/cm ²)
<u>Permanent Linear Change (%)</u>		
Green to 1500°F (815°C)	0.0 to -0.4	
230°F (110°C) to 1500°F (815°C)	0.0 to -0.3	
<u>Apparent Porosity, %</u>		
After 1000°F (540°C)	45%	
<u>Thermal Conductivity or "K" Factor</u>		
Mean Temperature	BTU/ft ² /Hr/°F/in.	W/mK
500°F (260°C)	3.4	0.49
1000°F (540°C)	2.9	0.42
1500°F (815°C)	3.2	0.46

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