



Insulating Castables

Product Data

RESCOCAST 3E

RESCOCAST 3E is a high strength, special lightweight heat insulating castable designed primarily for use in the petrochemical industry for single component linings in FCC vessels, etc. The product can be applied by gunite or casting methods. For pumpcasting or shotcreting applications, RESCOCAST 3E PC is recommended.

Maximum Service Temperature: 2200°F (1205°C)

Bulk Density: 61 lbs/ft³ (976 kg/m³)

Cold Crushing Strength:

1500°F (815°C)	600-1000 psi (42-70 kg/cm ²)
2000°F (1095°C)	500- 700 psi (35-49 kg/cm ²)
2200°F (1205°C)	500- 700 psi (35-49 kg/cm ²)

Modulus Of Rupture:

1500°F (815°C)	100-200 psi (7-14 kg/cm ²)
2000°F (1095°C)	150-200 psi (11-14 kg/cm ²)
2200°F (1205°C)	150-200 psi (11-14 kg/cm ²)

Permanent Linear Change(%):

1500°F (815°C)	-0.1 to -0.3
2000°F (1095°C)	-0.3 to -0.8
2200°F (1205°C)	-0.3 to -1.0

Porosity (%): 50

Thermal Conductivity or “K” Factor:

Mean Temp.	BTU/ft ² /Hr/°F/in	W/mK
500°F (260°C)	1.40	0.20
1000°F (540°C)	1.60	0.23
1500°F (815°C)	1.70	0.25

Typical Chemical Analysis(%):

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	CaO	MgO	Alkalies	TiO ₂
37.9	36.2	2.4	20.4	0.1	1.7	1.3

Standard Packaging: 50 - 50 lb. bags per pallet

The properties shown on this data sheet represent typical average results generated 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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26/10/10 is the date that this data sheet was updated. Check with your RESCO sales representative or RESCO website to determine you have the current sheet

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RESCOCAST 3E

GUNNED DATA

RESCOCAST 3E can be readily applied by gunite application. Data shown are the average results of tests following the guidelines set forth in ASTM C-903-70 "Preparing Refractory Concrete Specimens by Cold Gunning."

Bulk Density: 65-75 lbs/ft³ (1040-1200 kg/m³)

Cold Crushing Strength:

1500°F (815°C)	700-1100 psi (49-77 kg/cm ²)
2000°F (1095°C)	600-900 psi (42-63 kg/cm ²)
2200°F (1205°C)	600-900 psi (42-63 kg/cm ²)

Modulus Of Rupture:

1500°F (815°C)	300-600 psi (21-42 kg/cm ²)
2000°F (1095°C)	300-600 psi (21-42 kg/cm ²)
2200°F (1205°C)	350-600 psi (25-42 kg/cm ²)

Permanent Linear Change(%):

1500°F (815°C)	-0.2 to -0.4
2000°F (1095°C)	-0.5 to -1.0
2200°F (1205°C)	-0.5 to -1.2

Porosity(%): 45

Conductivity or "K" Factor:

Mean Temp.	BTU/ft ² /Hr/°F/in	W/mK
500°F (260°C)	1.55	0.22
1000°F (540°C)	1.75	0.25
1500°F (815°C)	2.00	0.29