

## RESCOCAST 3E

RESCOCAST 3E IS A HIGH STENGTH 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. FOR PUMPCASTING USE RESCOCAST 3EP.

CAST DATA:

MAXIMUM SERVICE TEMPERATURE (M.S.T.)                      2200 °F    (1205°C)

BULK DENSITY

After 815°C                                      61    LBS/FT<sup>3</sup>                      (976    KG/M<sup>3</sup>)

COLD CRUSHING STRENGTH

After 815°C	600 - 1000	P.S.I.	42 - 70	KG/CM <sup>2</sup>
After 1095°C	500 - 700	P.S.I.	35 - 49	KG/CM <sup>2</sup>
After M.S.T.	500 - 700	P.S.I.	35 - 49	KG/CM <sup>2</sup>

COLD MODULUS OF RUPTURE

After 815°C	100 - 200	P.S.I.	7 - 14	KG/CM <sup>2</sup>
After 1095°C	150 - 200	P.S.I.	11 - 14	KG/CM <sup>2</sup>
After M.S.T.	150 - 200	P.S.I.	11 - 14	KG/CM <sup>2</sup>

PERMANENT LINEAR CHANGE

110 to 815°C	- 0.1 TO - 0.3 %
110 to 1095°C	- 0.3 TO - 0.8 %

POROSITY

After 540°C                                      50 %

CONDUCTIVITY OR "K" FACTOR

<u>MEAN TEMP</u>	<u>BTU/FT<sup>2</sup>/HR/°F/IN</u>	<u>W/mK</u>
@ 260°C (500°F)	1.40	0.20
@ 540°C (1000°F)	1.60	0.23
@ 815°C (1500°F)	1.70	0.25

TYPICAL CHEMICAL ANALYSIS (%)

<b>AL<sub>2</sub>O<sub>3</sub></b>	<b>SiO<sub>2</sub></b>	<b>Fe<sub>2</sub>O<sub>3</sub></b>	<b>CaO</b>	<b>MgO</b>	<b>TiO<sub>2</sub></b>	<b>AlK</b>
<b>39.3</b>	<b>40.1</b>	<b>1.7</b>	<b>14.2</b>	<b>0.8</b>	<b>1.3</b>	<b>2.3</b>

The properties shown on this data sheet represent typical average results generated using standard ASTM test methods (unless otherwise noted) conducted under controlled conditions 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. RESCO PRODUCTS disclaims any expressed or implied warranties based on this sheet. 01/08/13 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

# RESCOCAST 3E

RESCOCAST 3E CAN ALSO BE READILY APPLIED BY GUNITE APPLICATION. DATA SHOWN ARE AVERAGE RESULTS OF TESTS FOLLOWING THE GUIDE LINES SET FORTH IN ASTM C-903-70 "PREPARING REFRACTORY CONCRETE SPECIMEN'S BY COLD GUNNING".

MAXIMUM SERVICE TEMPERATURE (M.S.T.) (1200°C)

## BULK DENSITY

After 815°C	70 - 80	LBS/FT <sup>3</sup>	1120 - 1280	KG/M <sup>3</sup>
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## COLD CRUSHING STRENGTH

After 815°C	700 - 1100	P.S.I.	49 - 77	KG/CM <sup>2</sup>
After 1095°C	600 - 900	P.S.I.	42 - 63	KG/CM <sup>2</sup>
After M.S.T.	600 - 900	P.S.I.	42 - 63	KG/CM <sup>2</sup>

## COLD MODULUS OF RUPTURE

After 815°C	300 - 600	P.S.I.	21 - 42	KG/CM <sup>2</sup>
After 1095°C	300 - 600	P.S.I.	21 - 42	KG/CM <sup>2</sup>
After M.S.T.	350 - 600	P.S.I.	25 - 42	KG/CM <sup>2</sup>

## PERMANENT LINEAR CHANGE

110°C to 815°C	- 0.2	TO	- 0.4	%
110°C to 1095°C	- 0.5	TO	- 1.0	%
110°C to M.S.T.	- 0.5	TO	- 1.2	%

## CONDUCTIVITY OR "K" FACTOR

<u>MEAN TEMP</u>	<u>BTU/FT<sup>2</sup>/HR/°F/IN</u>	<u>W/mK</u>
@ 260°C (500°F)	1.55	0.22
@ 540°C (1000°F)	1.75	0.25
@ 815°C (1500°F)	2.00	0.29

## POROSITY

@ 540°C 45 PERCENT

## PACKAGING

25 KG BAGS