

RESCOCAST 3A

RESCOCAST 3A IS A LIGHTWEIGHT INSULATING CASTABLE WHICH HAS A SERVICE LIMIT TEMPERATURE OF 1370°C AND LESS THAN 1 PERCENT LOW IRON CONTENT. IT IS USED PRIMARILY WHERE REDUCING ATMOSPHERES MAY BE PRESENT. RESCOCAST 3A CAN BE READILY APPLIED BY CASTING OR GUNITE APPLICATION.

MAXIMUM SERVICE TEMPERATURE (M.S.T.) (1370°C)

BULK DENSITY

@ 110°C	64 - 70	LBS/FT ³	1025 - 1121	KG/M ³
@ 815°C	57 - 62	LBS/FT ³	913 - 993	KG/M ³

COLD CRUSHING STRENGTH

@ 815°C	300 - 450	P.S.I.	21 - 32	KG/CM ²
@ 1095°C	300 - 450	P.S.I.	21 - 32	KG/CM ²
@ M.S.T.	400 - 550	P.S.I.	28 - 38	KG/CM ²

COLD MODULUS OF RUPTURE

@ 815°C	100 - 200	P.S.I.	7 - 14	KG/CM ²
@ M.S.T.	150 - 250	P.S.I.	10 - 18	KG/CM ²

PERMANENT LINEAR CHANGE

@ 815°C	- 0.30 TO - 0.80 %
@ M.S.T.	- 0.80 TO - 1.30 %

POROSITY

@ 540°C	50 %
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CONDUCTIVITY OR "K" FACTOR

<u>MEAN TEMP</u>	<u>BTU/FT²/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	0.26
@ 1095°C (2000°F)	1.85	0.27

TYPICAL CHEMICAL ANALYSIS (%)

AL ₂ O ₃	SiO ₂	Fe ₂ O ₃	CaO	MgO	TiO ₂	AlK
46.9	38.7	0.8	9.9	0.3	0.7	2.0

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 3A

RESCOCAST 3A 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.) (1370°C)

BULK DENSITY

@ 815°C 65 - 75 LBS/FT³ 1040 - 1200 KG/M³

COLD CRUSHING STRENGTH

@ 815°C 350 - 500 P.S.I. 25 - 35 KG/CM²
@ 1095°C 350 - 500 P.S.I. 25 - 35 KG/CM²
@ M.S.T. 350 - 500 P.S.I. 25 - 35 KG/CM²

COLD MODULUS OF RUPTURE

@ 815°C 150 - 250 P.S.I. 10 - 17 KG/CM²
@ 1095°C 150 - 250 P.S.I. 10 - 17 KG/CM²
@ M.S.T. 250 - 450 P.S.I. 10 - 17 KG/CM²

PERMANENT LINEAR CHANGE

@ 815°C - 0.10 TO - 0.30 %
@ 1095°C - 0.30 TO - 0.60 %
@ M.S.T. - 0.40 TO - 1.10 %

CONDUCTIVITY OR "K" FACTOR

<u>MEAN TEMP</u>	<u>BTU/FT²/HR/°F/IN</u>	<u>W/mK</u>
@ 260°C (500°F)	1.85	0.27
@ 540°C (1000°F)	2.35	0.33
@ 815°C (1500°F)	2.50	0.35

PACKAGING 25 KG BAGS

POROSITY 50 PERCENT @ 1000°F (540°C) (CAST)
45 PERCENT @ 1000°F (540°C) (GUNITED)

ASTM CLASS C-401 CLASSIFICATION "Q"