

RESCOCAST 17EM

RESCOCAST 17EM WAS ORIGINALLY DEVELOPED TO MEET THE REQUIREMENTS OF THE PETROCHEMICAL INDUSTRY FOR HIGHER OPERATING TEMPERATURES AND LOWER HEAT LOSSES. LOWER THERMAL CONDUCTIVITY IS THE RESULT OF USING A PATENTED SYSTEM OF RAW MATERIALS. THE SPECIAL RAW MATERIALS USED ALSO GIVE THE PRODUCT A HIGH RESISTANCE TO THERMAL SPALLING AND EROSION. RESCOCAST 17EM IS USED IN APPLICATIONS WHERE IT IS NOT PRACTICAL TO INSTALL THE MATERIAL BY VIBRATION CASTING OR GUNNING. TYPICALLY IT WOULD BE USED HANDPACKING INSTALLATIONS SUCH AS FIELD JOINTS.

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

BULK DENSITY

@ 110°C	115 - 120	LBS/FT ³	1842 - 1922	KG/M ³
@ 815°C	108 - 115	LBS/FT ³	1730 - 1842	KG/M ³

COLD CRUSHING STRENGTH

@ 540°C	5500 - 7500	P.S.I.	385 - 530	KG/CM ²
@ 815°C	5000 - 7000	P.S.I.	350 - 500	KG/CM ²
@ 1095°C	4200 - 6000	P.S.I.	295 - 420	KG/CM ²

COLD MODULUS OF RUPTURE

@ 540°C	800 - 1000	P.S.I.	56 - 70	KG/CM ²
@ 815°C	700 - 1000	P.S.I.	49 - 70	KG/CM ²
@ 1095°C	600 - 850	P.S.I.	42 - 60	KG/CM ²

PERMANENT LINEAR CHANGE

@ 815°C	- 0.10 TO - 0.30 %
@ 1095°C	- 0.20 TO - 0.40 %

EROSION LOSS (ASTM C-704) LESS THAN 20.0 CC

CONDUCTIVITY OR "K" FACTOR

<u>MEAN TEMP</u>	<u>BTU/FT²/Hr/°F/in</u>	<u>W/mK</u>
@ 540°C (1000°F)	5.0	0.71
@ 815°C (1500°F)	5.6	0.80
@ 1095°C (2000°F)	6.1	0.87

TYPICAL CHEMICAL ANALYSIS (%)

AL ₂ O ₃	SiO ₂	Fe ₂ O ₃	CaO/MgO	TiO ₂	AlK
53.8	36.2	0.7	8.0	1.0	0.3

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 17EM

RESCOCAST 17EM CAN BE APPLIED BY THE GUNITE METHOD, HOWEVER IT IS STRONGLY RECOMMENDED THAT RESCOCAST 17EMG BE USED FOR GUNITE INSTALLATIONS. PREDAMPENING AND LONG "AGEING" TIMES WILL BE REQUIRED IF YOU DO NOT USE THE GUNNING GRADE. DATA SHOWN ARE RESULTS OF TESTS FOLLOWING THE GUIDELINES SET FORTH IN ASTM C-903-70 "PREPARING REFRACTORY CONCRETE SPECIMEN'S BY COLD GUNNING".

BULK DENSITY

@ 815°C	109 - 115	LBS/FT ³	1745 - 1840	KG/M ³
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COLD CRUSHING STRENGTH

@ 540°C	3500 - 6500	P.S.I.	385 - 455	KG/CM ²
@ 815°C	3000 - 6000	P.S.I.	210 - 420	KG/CM ²
@ 1400°C	2500 - 5000	P.S.I.	175 - 350	KG/CM ²

COLD MODULUS OF RUPTURE

@ 540°C	800 - 1000	P.S.I.	56 - 70	KG/CM ²
@ 815°C	700 - 1000	P.S.I.	49 - 70	KG/CM ²
@ 1400°C	600 - 850	P.S.I.	42 - 60	KG/CM ²

PERMANENT LINEAR CHANGE

@ 815°C	- 0.10	TO	- 0.30	%
@ 1095°C	- 0.20	TO	- 0.40	%

PACKAGING

25 KG BAGS

POROSITY

35 PERCENT @ 1000°F

EROSION LOSS ASTM C-704

LESS THAN 20.0 CC