

## **INSULATING CASTABLES**

PRODUCT DATA

## **QUIKLITE 3E**

QUIKLITE 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.
QUIKLITE 3E IS FORMULATED FOR RAPID HEATUP WITHOUT THE TRADITIONAL RAMP ANNO HOLD
HEATING SCHEDULE

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

After	815°	С	61	LBS	/гт <sup>3</sup>	(976	KG	/ <b>M</b> <sup>3</sup> )	)
	0 = 0	<u> </u>	<u> </u>	,		( ) , 0	1.0,		,

#### 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	용
110	to	1095°C	_	0.3	TO	_	0.8	용

#### POROSITY

After 540°C 50 %

#### CONDUCTIVITY OR "K" FACTOR

MEAN TEMP	BTU/FT <sup>2</sup> /HR/°F/IN	W/mK
@ 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</b> 2 <b>O</b> 3	SiO2	<b>Fe</b> 2O3	CaO	MgO	TiO2	AlK
39.3	40.1	1.7	14.2	0.8	1.3	2.3

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.

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# **QUIKLITE 3E**

QUIKLITE 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

MEAN TEMP	BTU/FT2/HR/°F/IN	W/mK
@ 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