

# **INSULATING CASTABLES**

PRODUCT DATA

# **QUIKLITE 3**

QUIKLITE 3 IS A LIGHTWEIGHT HAVING A COMBINATION OF HIGH STRENGTH AND LOW HEAT CONDUCTIVITY. IT CAN BE USED AS A BACK-UP MATERIAL IN BI-WALL LININGS AS WELL AS SINGLE LAYER LININGS FOR CRUDE HEATERS, FURNACES, AND OTHER PROCESS APPLICATIONS .QUIKLITE 3 IS FORMULATED FOR RAPID HEATUP WITHOUT THE TRADITIONAL RAMP ANNO HOLD HEATING SCHEDULE.IT CAN BE CAST OR TROWEL APPLIED. CAST DATA:

MAXIMUM SERVICE TE	MPERATURE	(M.S.T.)	(1300°C)		
BULK DENSITY					
After 110°C After 815°C	65 - 72 58 - 64	_	1041 - 1153 KG/M <sup>3</sup> 929 - 1025 KG/M <sup>3</sup>		
COLD CRUSHING STRE	NGTH				
After 1095°C		P.S.I.	28 - 49 KG/CM <sup>2</sup> 42 - 63 KG/CM <sup>2</sup> 35 - 56 KG/CM <sup>2</sup>		
COLD MODULUS OF RUPTURE					
_	150 - 250	P.S.I. P.S.I. P.S.I.	7 - 14 KG/CM <sup>2</sup> 10 - 18 KG/CM <sup>2</sup> 10 - 18 KG/CM <sup>2</sup>		
PERMANENT LINEAR CHANGE					
Green to 110°C 110°C to 815°C 110°C to 1095°C 110°C to M.S.T.		0.0 TO - 0.2 TO			

#### CONDUCTIVITY OR "K" FACTOR

ME	EAN TEMP	BTU/FT <sup>2</sup> /HR/°F/IN	W/mK
9	260°C (500°F)	2.3	0.33
9	540°C (1000°F)	1.8	0.26
9	815°C (1500°F)	2.1	0.30

#### TYPICAL CHEMICAL ANALYSIS (%)

<b>AL</b> 203	SiO2	<b>Fe</b> 203	CaO	MgO	TiO2	AlK
28.5	44.9	6.9	13.6	1.0	2.0	2.8

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 3**

QUIKLITE 3 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".

(1300°C)

21 - 35

16 - 32 16 - 32 KG/CM<sup>2</sup>

KG/CM<sup>2</sup>

KG/CM<sup>2</sup>

MAXIMUM SERVICE TEMPERATURE (M.S.T.)

BULK DENSITY				
After 815°C	70 - 80	LBS/FT <sup>3</sup>	1120 - 1280	KG/M³
COLD CRUSHING ST	RENGTH			
After 815°C	500 - 900	P.S.I.	35 - 63	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			

300 - 500 P.S.I. 250 - 450 P.S.I. 250 - 450 P.S.I.

## PERMANENT LINEAR CHANGE

After 815°C

After 1095°C

After M.S.T.

Green to 110°C	0.0	TO	- 0.1 %
110°C to 815°C	0.0	TO	- 0.4 %
110°C to 1095°C	- 0.2	TO	- 0.8 %
110°C to M.S.T.	- 0.4	TO	- 1.5 %

## CONDUCTIVITY OR "K" FACTOR

MEAN TEMP	BTU/FT2/HR/°F/IN	W/mK
@ 260°C (500°F)	2.8	0.41
@ 540°C (1000°F)	2.3	0.33
@ 815°C (1500°F)	2.6	0.38

POROSITY

55 PERCENT @ 1000°F (540°C) (CAST)

50 PERCENT @ 1000°F (540°C) (GUNITED)

ASTM CLASS C-401 CLASSIFICATION "P"