



# STACKCRETE 62 M

VIBRATION CAST, PUMP-CAST, SHOTCRETE, SELF-FLOW

## General Information

Stackcrete 62 M is a mullite-based, low cement mix that exhibits excellent strengths, refractoriness, resistance to chemical attack (particularly alkalis) and excellent abrasion resistance. This mix may be vibration cast, pumped or shotcreted. Applications for this product include vertical preheat stacks, charging zones, duct work, combustion chambers, cooling areas and as a general purpose high strength, dense, 60-65% alumina castable.

## Chemical Analysis

Al <sub>2</sub> O <sub>3</sub>	61.7%
SiO <sub>2</sub>	32.8%
CaO	2.3%
TiO <sub>2</sub>	1.8%
Fe <sub>2</sub> O <sub>3</sub>	0.9%
Alkalies	0.2%
Other	0.3%

Maximum Use Temperature

1700°C (3100°F)

Material Required Vibration Cast

2.45 g/cm<sup>3</sup> (153 lb/ft<sup>3</sup>)

Material Required For Shotcreting

2.37 g/cm<sup>3</sup> (148 lb/ft<sup>3</sup>)

Grain Size

5 mm (4 mesh) and finer

Installation Methods

Vibration Cast, Self-Flow, Pump Cast, Shotcrete

Standard Packaging

25 kg (55 lb) multi-wall paper bags

Note:

Bulk bags available upon request

## VIBRATION CAST DATA

Temperature		Density		PLC <sup>†</sup>	CMOR		CCS		HMOR		Porosity	K-factor*		Abrasion Resistance
°C	°F	g/cm <sup>3</sup>	lb/ft <sup>3</sup>		MPa	psi	MPa	psi	MPa	psi		W·m <sup>-1</sup> ·K <sup>-1</sup>	BTU·in ft <sup>2</sup> ·hr·F	
110	230	2.53	158.0	-	16.0	2320	134.4	19500	-	-	4	2.38	16.5	4 - 8
815	1500	2.45	153.0	-0.2	26.9	3900	167.1	24250	37.9	5500	6	2.15	14.9	3 - 7
1100	2000	2.47	154.0	-0.5	26.0	3775	127.5	18500	35.8	5200	14	2.08	14.4	-
1400	2550	2.44	152.0	-0.1	23.1	3350	132.6	19250	-	-	17	-	-	-
1500	2732	2.42	151.0	0.3	24.5	3550	117.1	17000	-	-	4	-	-	-
1600	2910	2.47	154.0	-0.1	21.0	3050	156.4	22700	-	-	4	-	-	-

## SHOTCRETE DATA

Temperature		Density		PLC <sup>†</sup>	CMOR		CCS		HMOR		Porosity	K-factor*		Abrasion Resistance
°C	°F	g/cm <sup>3</sup>	lb/ft <sup>3</sup>		MPa	psi	MPa	psi	MPa	psi		W·m <sup>-1</sup> ·K <sup>-1</sup>	BTU·in ft <sup>2</sup> ·hr·F	
110	230	2.44	152.0	-	15.5	2250	71.0	10300	-	-	12	2.33	16.2	4 - 9
815	1500	2.37	148.0	-0.3	23.4	3400	75.1	10900	23.8	3450	17	2.10	14.6	3 - 7
1100	2000	2.40	150.0	-0.4	22.7	3300	77.2	11200	26.0	3775	13	2.03	14.1	-
1400	2550	2.35	147.0	0.2	24.5	3550	102.0	14800	-	-	14	-	-	-
1500	2732	2.37	148.0	-0.1	24.5	3550	70.3	10200	-	-	13	-	-	-
1600	2910	2.40	150.0	-0.4	28.9	4200	113.0	16400	-	-	9	-	-	-

<sup>†</sup>Permanent linear change after firing

\*estimated

## SET TIMES AND WATER REQUIREMENTS

	Vibration	Shotcrete
Water Required	4.5 - 5.2%	5.4 - 6.2%
Working Time	up to 1 hr	4 - 8 hr
Initial Set	2 - 6 hr	5 - 12 hr
Final Set	3 - 12 hr	8 - 18 hr

Allied Mineral Products, Inc. supplies a complete line of monolithic refractories for industrial applications. For more information or a complete evaluation of your refractory requirements, please contact your local Allied representative.

Warning: Contains aluminum oxide, aluminosilicates, cement, and silica. The International Agency for Research on Cancer (IARC) has classified crystalline silica inhaled in the form of quartz or cristobalite carcinogenic to humans. Refer to Material Safety Data Sheet for additional information and disposal instructions. Avoid breathing dust. Wear NIOSH approved respirator during installation, removal, and disposal of product to prevent inhalation of dust. Avoid contact with skin and eyes. Cement powder or freshly mixed castable may cause eye and skin irritation. Steam spalling, which can lead to personal injury, may result from improper drying and firing procedures. In case of eye contact, flush immediately and repeatedly with water and consult a physician. For safest use and optimum performance, proper practices must be followed.

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