ARMORMAX® 608

VIBRATION CAST

General Information

ARMORMAX® 608 is a robust mullite-based mix with an SiC addition. It is combined with a high percentage of stainless steel fiber content to improve overall fracture toughness and thermal shock resistance. The enhanced flow of the refractory base mix allows this product to be mixed in most field mixers. It is particularly suitable for applications where high alkali, high mechanical abuse and thermal cycling are encountered. The metal fibers used provide the optimum resistance to high temperature oxidation with continuous operation to 1200°C (2200°F) and intermittent operation to 1315°C (2400°F). The base refractory mix without the fibers is suitable for temperatures to 1650°C (3000°F).

Chemical Analysis

Al_2O_3	59.9%
SiO_2	27.1%
SiC	8.2%
CaO	1.9%
TiO_2	1.6%
Fe_2O_3	0.8%
Other	0.5%

Maximum Use Temperature	1315°C (2400°F)
Material Required Vibration Cast	2.64 g/cm^3 (164 lb/ft^3)
Grain Size	2 mm (8 mesh) and finer
Installation Method	Vibration Cast
Standard Packaging	25 kg (55 lb) multi-wall paper bags

VIBRATION CAST DATA

Temperature		Density		PLC†	MOR		CCS		Porosity	Abrasion
°C	°F	g/cm^3	lb/ft^3	%	MPa	psi	MPa	psi	%	cm^3
110	230	2.60	162	-	20.6	2993	116.6	16,911	-	-
815	1500	2.64	165	-0.2	23.7	3433	104.0	15089	15	3.43
1093	2000	2.68	167	-0.2	31.8	4613	160.5	23,280	15	-
1400	2550	2.55	159	0.1	25.8	3742	149.9	21749	16	-

† Permanent Linear Change After Firing

SET TIMES AND WATER REQUIREMENTS

	Vibration Cast
Water Required	5.8 - 6.5%
Working Time	1 - 2 hrs
Initial Set	2 - 10 hrs
Final Set	5 - 18 hrs

THERMAL SHOCK DATA

2200°F Prefired and Shock Temperature (5 Cycles)

Unshocked CMOR, psi	3740
Shocked, CMOR, psi	4075
Strength Retained, %	109

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, silicon carbide 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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Revised 10/27/14