

# AR-400® VC QT CASTABLE

## Product Information Sheet

## Monolithic Refractory

AR-400® VC QT is a unique, alumina-zirconia-silica-based high strength castable designed specifically for vibration placement. This product resists the highly erosive environment of petrochemical and refinery vessels. It is designed specifically for hydrocarbon processing applications and can be gunned or vibration cast.

**Service Temperature:** 2400 °F  
**Typical Water Required:** 7.7 %  
**Abrasion Resistance C-704, (Loss - Fired to 1500°F/816°C):** 4-7 cc

**Material Required:** 165 lb/ft<sup>3</sup>  
**Maximum Grain Size:** -

### Chemical Analysis

SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	Na <sub>2</sub> O + K <sub>2</sub> O	ZrO <sub>2</sub>	Other
9.8	59.3	0.6	7.4	0.3	0.8	21.5	0.1

### Typical Physical Properties

Tested in accordance with International and ASTM Standards

Prefired to	Bulk Density	Cold Crushing Strength	Cold Modulus of Rupture	Permanent Linear Change
(°F)	(lb/ft <sup>3</sup> )	(psi)	(psi)	(%)
230	172	11900	1850	-
1000	-	-	1825	-0.3
1500	165	10250	1625	-0.3
2000	-	-	1740	0.3

### Other Physical Properties

Tested in accordance with International and ASTM Standards

Prefired to	Apparent Porosity	Thermal Conductivity	Hot Modulus of Rupture	Permanent Volume Change
(°F)	(%)	(Btu.in/h.ft <sup>2</sup> .F)	(psi)	(%)
1500	-	8.7	2200	-
2000	-	8.9	1240	-

**Formerly:** AR-400® VC (WITH QT)

Product Number: LEJ10129 MX1N CASB Revision : D:00

Drying & Firing : LEJ.1801

Pumping : N/A

Shotcreting : N/A

MSDS Reference : LEJ10129

Mixing / Installation : LEJ.1102

Effective Date: 03/01/2007

The physical and/or chemical properties and specifications of the product set forth above represent typical average results obtained in accordance with generally accepted standard test methods conducted under controlled conditions, and are subject to normal manufacturing variations. Vesuvius reserves the right to modify the properties and specifications at any time without prior notice.



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