



Revision: G.00

85-Ram HS TS LES00145 MX0 MOLD

**Monolithic
Refractory
Product Information**

Date: 23 May 2012

A high alumina phosphate bonded mouldable for use in torpedo ladle throats, soaking pit slag lines, electric arc furnace roofs, etc and molten metal contact applications. Supplied ready to use.

Service Temperature:	1650 °C	Material Required:	2830 kg/m ³
Typical Water Required:	-	Maximum Grain Size:	5.0 mm
Abrasion Resistance C-704, (Loss - Fired to 1500°F/816°C):	<5.0 cc	Permanent Linear Change, Rammed/Dried to 110 °C:	-0.1 %

Chemical Analysis

SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃	CaO	MgO	Na ₂ O + K ₂ O	P ₂ O ₅
9.5	2.3	82.0	1.3	0.3	0.3	0.4	3.9

Typical Physical Properties

Tested in accordance with International and European Standards

Prefired to (°C)	Bulk Density (kg/m ³)	Cold Crushing Strength (N/mm ²)	Cold Modulus of Rupture (N/mm ²)	Permanent Linear Change (%)
110	2700	15	8.6	-
800	2635	29	14.8	-0.2
1200	2635	36	16.8	-0.2
1400	2620	48	15.5	+0.1
1600	2735	42	13.9	-1.3

Other Physical Properties

Tested in accordance with International and European Standards

Prefired to (°C)	Apparent Porosity (%)	Thermal Conductivity (W/m.K)	Hot Modulus of Rupture (N/mm ²)	Permanent Volume Change (%)
20	-	3.30	-	-
200	-	2.76	-	-
400	-	2.37	-	-
600	-	2.24	-	-
800	-	2.18	-	-
1000	-	2.24	-	-

Formerly: 85 Ram HS Slabs (8001) Thermiplast 810D Thermiplast 865PCE

Drying & Firing:	N/A	Installation Method:	N/A	Mixing / Installation:	N/A
Shotcreting:	N/A	Pumping:	N/A	MSDS Reference:	LES00145

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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