



# Plibrico Company, LLC

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# Technical Data Sheet Redline Redcast Duraflor

Product # 50104

Available Internationally As:

Redline Redcast Duraflor

### Product Description:

A coarse aggregate material which features high strengths and abrasion resistance at low temperatures. It is designed specifically for flooring applications which are subject to high degrees of thermal shock due to molten metal spillage, hot castings, or dross. This unique castable differs from other conventional materials in that it performs extremely well in an unfired, or green condition.

**Standard Packaging:** 55 # / 25 kg Bag

**Shelf Life:** 12 months

**Service Limit:** 1800 °F 980 °C

**Contact Limit:** N/A °F N/A °C

**Bulk Density - In Service:** 129 pcf 2067 kg/m<sup>3</sup>

**Bulk Density - To Place:** 129 pcf 2067 kg/m<sup>3</sup>

**Minimum Time To Firing:** 24 hr

**Abrasion Loss after 1500°F / 815°C**  
 per ASTM C704

N/A cc

Chemistry (calcined) %					
Al <sub>2</sub> O <sub>3</sub>	33.1	Alk	1.0	MgO	1.3
SiO <sub>2</sub>	43.3	TiO <sub>2</sub>	2.0	ZrO <sub>2</sub>	
CaO	16.9	P <sub>2</sub> O <sub>5</sub>		Other	
Fe <sub>2</sub> O <sub>3</sub>	2.5	SiC			

Water Range Per Standard Package		%	Quarts	Liters
Vib Casting	min	11.5	3.0	2.9
	max			
Casting	min	11.5	3.0	2.9
	max			
Pumping	min			
	max			

Coefficient of Thermal Expansion (reversible):	
x 10 <sup>-6</sup> in/in/°F	x 10 <sup>-6</sup> mm/mm/°C

Thermal Conductivity	btu*in/hr*ft <sup>2</sup> *°F	W/m°C
500°F / 260°C		
1000°F / 540°C		
1500°F / 815°C		
2000°F / 1090°C		

Temperature		Linear Change% per ASTM C113	CCS per ASTM C133		Cold MOR per ASTM C133		Hot MOR per ASTM C583	
°F	°C		psi	MPa	psi	MPa	psi	MPa
75	20	0.0	7800	54.0	930	6.4		
250	120	-0.2	11000	76.0	1425	9.8		
1500	820	-0.8			880	6.1		

Other Data:

Release Date: 1 May 2008

Heat Up Guide:

ASTM Class:

Regular Castable

Refractory material should be stored in a cool, dry environment.

**Note:** All data are averaged results of ASTM tests (where applicable) on laboratory specimens. Reasonable variations in data can be expected. Data is not to be used for specification purposes. Product data is periodically updated to reflect product, raw material, process and/or testing changes. Please consult your Plibrico representative to make sure you have the most current data.