



Plibrico Company, LLC

1935 Techny Road - Unit 16
 Northbrook, IL 60062
 (312) 337-9000
 www.plibrico.com

Technical Data Sheet Redline Redcast SC 75

Product # 52105

Available Internationally As:

Redline Redcast SC 75

Product Description:

This low cement, high purity silicon carbide castable provides excellent abrasion resistance, high thermal conductivity, and outstanding thermal shock resistance. It will perform particularly well in areas subjected to high impact such as aluminum transfer troughs and tapout blocks in aluminum melting and holding furnaces.

Standard Packaging: 55 # / 25 kg Bag

Shelf Life: 6 months

Service Limit: 2700 °F 1480 °C

Contact Limit: 1700 °F 927 °C

Bulk Density - In Service: 161 pcf 2579 kg/m³

Bulk Density - To Place: 161 pcf 2579 kg/m³

Minimum Time To Firing: 24 hr

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

N/A cc

Chemistry (calcined) %					
Al ₂ O ₃	15.9	Alk		MgO	0.1
SiO ₂	3.4	TiO ₂	1.1	ZrO ₂	
CaO	0.7	P ₂ O ₅		Other	
Fe ₂ O ₃	0.6	SiC	76.7		

Water Range Per Standard Package		%	Quarts	Liters
Vib Casting	min	4.8	1.3	1.2
	max			
Casting	min	4.8	1.3	1.2
	max			
Pumping	min			
	max			

Coefficient of Thermal Expansion (reversible):	
x 10 ⁻⁶ in/in/°F	x 10 ⁻⁶ mm/mm/°C

Thermal Conductivity	btu*in/hr*ft ² *°F	W/m°C
500°F / 260°C	55.4	7.98
1000°F / 540°C	50.2	7.23
1500°F / 815°C	43.1	6.21
2000°F / 1090°C	35.0	5.04

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
250	120	-0.1	5800	40.0	2010	13.9		
1000	540	-0.2			1970	13.6		
1500	820	-0.2			2225	15.3		
2000	1090	-0.3			2340	16.1		
2500	1370	-0.1			2720	18.8		

Other Data:

Release Date: 1 Jul 1998

Heat Up Guide: Redline Schedule 1

ASTM Class:

Low Cement 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.