

Ultra Low Refractory Castable Cement Castables For Industrial Furnace

Our Product Introduction

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Basic Information

- Place of Origin: Zhengzhou ,China
- Brand Name: Rongsheng Xinwei
- Certification: ISO9001
- Model Number: Clay, High Alumina, Corundum
- Minimum Order Quantity: 1 Ton
- Price: 200-800USD
- Packaging Details: packed on wooden pallets, with water-proof cover, and tightened with plastic/steel bandages
- Delivery Time: 20-30DAYS
- Payment Terms: TT; L/C
- Supply Ability: 2000tons /month



Product Specification

- Application Field: Cement Kiln, Blast Furnace, Hot Blast Stove
- Application Temperature: 800-1400
- Bulk Density: 2.0-3.0g/cm³
- Chemical Composition: Al₂O₃, SiO₂, Fe₂O₃, CaO, MgO
- Color: Gray
- Compressive Strength: 30-50Mpa
- Flexural Strength: 5-10Mpa
- Linear Change Rate: 2.0-3.0%
- Material: Refractory Castable
- Porosity: 20-30%
- Refractoriness: 1700-1790
- Shape: Powder
- Thermal Conductivity: 0.2-0.3W/m.k
- Thermal Shock Resistance: Excellent
- Highlight: **Ultra Low Refractory Castable,**

Our Product Introduction

Product Description

Rongsheng Refractory Factory Supply Low And Ultra Low Cement Castables For Industrial Furnace

Description of Low and ultra-low Cement Castables

Low and ultra-low Cement Castables have the characteristics of small pore size, large density, good volume stability, high strength and small amount of water. They overcome the characteristics that the strength of ordinary castables decreases significantly at 800~1200℃, increase with the increase of temperature, and have excellent thermal shock resistance, slag resistance and corrosion resistance.

Advantages of Low Cement and Ultra-Low Cement Castables:

Compared with ordinary refractory castables, low-water low and ultra-low cement castables have a series of excellent properties. Therefore, low cement castables are widely used in the non-ferrous smelting and steel industry.

First, because the amount of cement added is only 1/2~1/15 of the ordinary refractory castable, the CaO brought into the castable is reduced from 2.5~8% to 0~2.5%. Therefore, the amount of the eutectic phase formed in the matrix is greatly reduced. Furthermore, the refractoriness, high-temperature strength, and slag resistance are all improved. As the amount of cement increases, the refractoriness decreases linearly. On the contrary, the low melting point is reduced at high temperature, so that the wear resistance, high-temperature flexural strength, and load softening temperature of the castable are significantly

improved.

Second, the water demand during mixing is only 1/2~1/3 (about 4~6%) of ordinary refractory castables. Therefore, the porosity is low and the body density is high, which is comparable to fired refractory products of the same material. The difference in the amount of water added results in different strengths of the castable.

Third, there is little or no cement hydrate after molding and curing. During the heating and baking, there is no problem that a large number of hydration bonds are destroyed and the strength is affected. Instead, as the heat treatment temperature increases, it gradually sinters and the strength gradually increases. Especially different from ordinary low cement castables, the mechanical strength is higher than the drying strength in the middle-temperature zone (900~1200). Both high temperature and normal temperature strength are better than ordinary castables.

Parameters of Low and ultra-low Cement Castables

Item		Index		Co
		Clay	High Alumina	
Al ₂ O ₃ %		≥45	≥75	
CaO %		1.8	1.5	
Bulk density g/cm ³	110 ×24h	≥2.3	≥2.6	
	1350 ×3h	≥2.26	≥2.61	
	1550 ×3h	/	/	
Cold Crushing Strength MPa	110 ×24h	≥70	≥75	
	1350 ×3h	≥85	≥90	
	1550 ×3h	/	/	
Flexural Strength MPa	110 ×24h	≥6	≥8	
	1350 ×3h	≥8	≥9	
	1550 ×3h	/	/	
Permanent linear change Rate %	1000 ×3h	-0.3	-0.2	
	1350 ×3h	±0.3	±0.5	
	1550 ×3h	/	/	
Maximum service temperature		1450	1600	



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