

CASTBALL

Spherical Ceramic Product for Foundry Molds

CASTBALL is a spherical ceramic product and it has an application as an additive in foundry molds, where it comes to versatility and offers a superior performance in smelting of steel, iron, aluminum and others, with primary use in the “cold box”. It is inert and contains no free silica or quartz. CASTBALL provides greater precision and accuracy of the castings to have low thermal expansion, offering a lower cost for correction of imperfections in the casting of large parts, including parts with thinner walls. Moreover, its high strength involves several cycles of recovery, reducing cost and consumption of the product.

Typical Physical Properties

Bulk Density	g/cm ³	2.0
	lb/ft ³	124.90
Specific Heat @ 1,100 °C	J/g.°C	0.4093
	cal/g.°C	0.0978
Thermal Conductivity @ 1,100 °C	W/m.°C	0.25
Thermal Expansion @ 1,100 °C	in/in	0.002533
	%LC	0.253
Sintering Point	°C	1,150
	°F	2,102

Sieve Analysis

	AFS 40	AFS 45	AFS 50	AFS 55	AFS 65	AFS 75	AFS 85
# 20	-	-	-	-	-	-	-
# 30	-	-	-	-	-	-	-
# 40	37	10	1	-	-	-	-
# 50	45	55	25	16	8	2	-
#70	13	28	60	54	39	15	13
# 100	3	6	13	25	44	59	44
# 140	1	1	1	5	7	20	29
# 200	-	-	-	-	1	4	14
# 270	-	-	-	-	1	-	-
Fines	-	-	-	-	-	-	-

Typical Physical Properties

Loss on ignition	%	<0.10
Moisture	%	<0.10
pH	%	7.15
Acid Demand Value	%	0.8

Typical Chemical Analysis by XRF (%)

Al ₂ O ₃	Fe ₂ O ₃	SiO ₂	TiO ₂	Other
74	15	6	1.5	3.5

Mineralogical Analysis (%)

Corundum	Hematite	Maghemite	Mullite	Anorthite
84.5	6.5	1.5	-	7.5

The MSDS requests should be sent to sds@grupocurimbaba.com.br.

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