

CASTBALL

SPHERICAL CERAMIC PRODUCT FOR FOUNDRY MOLDS

ABOUT:

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

Properties	Silica Sand	CASTBALL	CASTBALL Advantage
T fusion (°C)	1723*	2040	Increased refractoriness
Transformation	$\alpha \rightarrow \beta$	-	There is no sudden change up to 580°C
Coefficient Linear Thermal Expansion	17×10^{-6} (cm/cm/°C)	9×10^{-6} (cm/cm/°C)	Almost half of the total expansion
Thermal Conductivity at 1000°C	0.6 (cal/cm.min.°C)	1.5 (cal/cm.min.°C)	Better thermal conductivity
ΔT 1000°C cooling	255	880	Power cooler 3x bigger than the silica
H (Mohs Hardness)	7	9	Hardness higher; lower fracture regeneration

CHARACTERISTICS

	35 / 70	40 / 80
Calcination Loss, %	0	0
Bulk Density, g/cm ³	2.22	2.22
Permeability, AFS	> 300	> 300
Fineness Module, AFS	35.05	43.32
pH	6.95	6.95

The information contained in this data sheet has been determined through the application of accepted engineering practice and is believed to be reliable. Since the conditions of application and use of our products are beyond our control, no warranty is expressed or implied regarding accuracy of the information, the results to be obtained from use of the product, or that such use will not infringe on any patent. This information is furnished with the express condition that you will make your own tests to determine the suitability of the product for your particular use.



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