



Zircon Sand

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Chromite
 Foundry Sands
 Cerabeads
 Green Sand Additives
 (Bentonite, Carbobond & Carsins)
 Olivine Sand
 Resin Coated Sands and
 Chemically Bonded Sands
 Riser Sleeves, FLux and
 Metal Filters
 Zircon

Contact Us

Our sales team is ready to help you to determine the right product for your job.
 For more information please call us:
 Toll-free: 888-689-6661
 Tel: 519-720-9694
 E-mail: info@optaminerals.com
 Visit: www.optaminerals.com

Zircon Sand is a natural mineral and is mined in the USA. Stockpiles of Zircon Sand are maintained in order to assure consistent high quality and reliable supply of different grades for various industries.

USES AND FEATURES OF ZIRCON SAND

Application	Features
Sand molds and cores Metal chills	<ul style="list-style-type: none"> Resists metal penetration and "burn in" Low thermal expansion aids dimensional accuracy Resists metal reaction with most alloys Reduced cleaning and machining Low binder requirement High thermal conductivity
Prime coat slurry	<ul style="list-style-type: none"> Excellent casting surface Low reactivity with alloys
Back-up slurry and stucco	<ul style="list-style-type: none"> Exhibits non-wetting surface to molten metals Low thermal expansion
Cores	<ul style="list-style-type: none"> Excellent refractory properties
Shell molds	<ul style="list-style-type: none"> Dimensional accuracy

AVAILABLE SIZES

Particle size analysis is available upon request.

TECHNICAL SPECIFICATIONS (%)

Symbol	Name	Percentage
Fe ₂ O ₃	Guaranteed	0.075 max
(total iron as Fe ₂ O ₃)	Typical	0.04 – 0.07
TiO ₂	Guaranteed	0.15 max
	Typical	0.06 – 0.15
ZrO ₂ +HfO ₂	Typical	66.0 – 67.0
Al ₂ O ₃	Typical	0.20 – 0.70
CaO	Typical	0.01 – 0.04
P ₂ O ₅	Typical	0.06 – 0.10
SiO ₂	Typical	32.0 – 34.0
Free Silica	Typical	0.01 – 0.07
pH	Typical	5.5 – 7.00
Moisture	Typical	0.01 – 0.07

CHARACTERISTICS

Specific gravity	4.7
Bulk density	170 – 180 lb/ft ³ (2700 kg/m ³)
Hardness	7.5 Mohs
Angle of repose	30°
Melting point	4000° F (2200° C)
Thermal stability	no change to 3090° F (1700°C)
Loss on ignition	0.02 – 0.12%

PACKAGING

50 lb paper bags
3000 lb Super Sacs
Bulk (blower truck or rail hopper cars)