



Product Data Sheet

ZIRCON SAND

Guaranteed Chemical Analysis:

ZrO ₂ + HfO ₂	65.0% min
Fe ₂ O ₃	0.15% max
TiO ₂	0.25% max

Typical Physical Data:

Bulk Density:	2.6 t/m ³
Specific Gravity:	4.6

Typical Chemical Analysis:

It must be expected that some variation in chemical analysis will occur due to the varying nature of the heavy mineral ore bodies.

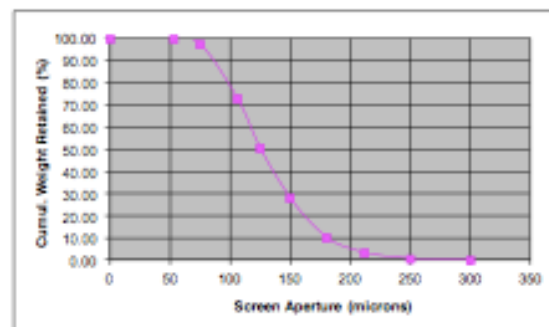
ZrO ₂ + HfO ₂	65.0 - 65.5%
Fe ₂ O ₃	0.07 - 0.14%
TiO ₂	0.19 - 0.24%
Al ₂ O ₃	0.35 - 0.75%
P ₂ O ₅	0.08 - 0.10%
SiO ₂ (total)	32.0 - 33.5%
Free SiO ₂ (as quartz)	0.25 - 0.45%
U	230 - 250ppm
Th	150 - 180ppm

Typical Screen Analysis:

Aperture (Microns)	Wt% (Retained)	Cum Wt%
250	0.7	1.5
212	2.7	7.7
180	6.9	26.2
150	17.9	60.6
125	22.5	87.7
106	22.3	97.3
75	24.5	99.9
53	2.4	100.0
-53	0.0	100.0
d50	125	

Other Properties

Colour	Tan/Off White
Melting Point	2200°C
Hardness (Mohs)	7.5



The typical size distribution, although not guaranteed, can be expected to be as shown in the above table and graph.

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USES

Coatings

Industrial Coatings
Marine Paints
Corrosion Resistant Coatings
Textured Coatings
Thermal Insulating Coatings
High Build Epoxy Coatings
Protective Coatings

Adhesives

Potting Cement
Grouts & Mortars

Composites & Plastics

Fibreglass

Foundry

Investment Casting
Sand Casting & Cores
Shell Moulds

Refractory & Ceramics

Sanitary ware
Fire Bricks
Castables
Insulating Materials
Refractory Mortars
Mould Wash Coating
Glazes

Abrasion & Friction

Abrasion Wheels
Brake Linings
Clutch Facings
Decorative Glass (Abrasion media)

Welding

Welding Rod Coating

Chemicals & Metals

Zirconia & Zirconium Chemicals
Zirconium Metals

BENEFITS

Fire Resistant
Use on Interior or Exterior
Reduces heat and cooling loss
Chemically Inert
Corrosion resistance
Chemical resistance
Resists mould and mildew
Opacifier
High Hardness
Abrasion resistance
Sound Dampening
Thermal Insulation
High Particle Strength
Low water absorption
Low shrinkage
Stable after 2200°C
Improved impact resistance
Improved durability
High thermal conductivity
Low expansion

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