

## ZIRCON Standard Grade

### Chemical Analysis (wt% by XRF)

Element	Typical	Guaranteed
ZrO <sub>2</sub> + HfO <sub>2</sub> *	65.5	> 65.0
SiO <sub>2</sub>	33.0	-
Al <sub>2</sub> O <sub>3</sub>	0.7 – 1.3	-
Fe <sub>2</sub> O <sub>3</sub>	0.10	≤0.15
TiO <sub>2</sub>	0.19 – 0.23	≤0.25
CaO	0.02	-
Cr <sub>2</sub> O <sub>3</sub>	0.01	-
MnO	0.02	-
P <sub>2</sub> O <sub>5</sub>	0.08	-
V <sub>2</sub> O <sub>5</sub>	0.03	-
Free Silica	< 1.0	-
U + Th	310 – 410 ppm	< 500 ppm
Th	130 – 180 ppm	-
Specific Activity <sup>1</sup>	0.5 – 0.7 Bq/gm	-
U	180 – 230 ppm	-
Specific Activity <sup>1</sup>	2.2 – 2.9 Bq/gm	-

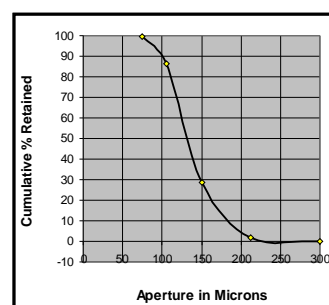
\* calculated by difference

<sup>1</sup>Specific Activity is calculated from the U & Th assay.

### Typical Particle Size Distribution

Aperture (um)	Retained (Wt %)	Cumulative (Wt %)
300	0.05	0.05
212	1.71	1.76
150	26.88	28.64
106	57.84	86.48
75	13.27	99.75
-75	0.25	100

AFS Grain Fineness Number: 97



### Typical Physical Properties

Element	Typical	OTHER INFORMATION
Bulk Density	2.7 Kg/Lt	See <a href="http://www.doral.com.au">www.doral.com.au</a> for Material Safety Data Sheet
Specific Gravity	4.6	EINECS NO. 239-019-6
Melting Point	2,200°C	CAS NO. 14940-68-2

### Packaging

Standard packaging is available in bulk shipments and 1 tonne and 2 tonne bulk bags.

### Contact Details

To obtain further information about our products, please send an email to [doral@doral.com.au](mailto:doral@doral.com.au):

Contact: <b>Graeme O'Grady</b> <b>Group Marketing Manager</b> Phone: +61 8 9439 8835 Fax: +61 8 9439 2892 Email: <a href="mailto:graeme.ogradys@doral.com.au">graeme.ogradys@doral.com.au</a>	Contact: <b>Lloyd Kaiser</b> <b>Marketing Manager – Global Development</b> Phone: +61 8 9439 8838 Fax: +61 8 9439 2892 Email: <a href="mailto:lloyd.kaiser@doral.com.au">lloyd.kaiser@doral.com.au</a>
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**Please Note:** This material is naturally occurring and some variations in grain size and/or chemical analyses can be expected.