



Standard Monoclinic Zirconias

Luxfer MEL Technologies monoclinic zirconias are high performance, high purity zirconium oxides suitable for use in a variety of applications where a high level of control of chemical and physical properties is needed.

Luxfer MEL Technologies monoclinic zirconias are manufactured in the UK by a precisely controlled chemical precipitation process that ensures consistency of both purity and performance.

Features

A range of grades with different average particle sizes and surface areas.

Applications

Depending on the specific requirements of particle size, surface area and purity, monoclinic zirconias are commonly used in:

- High performance technical ceramics
- Electronic applications such as PZT
- Oxygen sensors
- Thermal barrier coatings
- Ceramic pigments
- Refractories and insulation
- Abrasives and polishing

Chemical composition (typical values)

Grade	TiO ₂ (wt%)	SiO ₂ (wt%)	Fe ₂ O ₃ (wt%)
All grades	0.15	0.12	0.01

Physical properties (typical values)

Grade	Average particle size (µm)	Average surface area (m ² .g ⁻¹)
S	16	3.5 – 5.0
SC15	0.7	3.5
MS2	0.8	4
MS5	1	4.5
E15	0.6	5
E20	1.5	4
E30	16	5

Packaging

Standard packaging is 100 kg packed into poly-lined fibre-board drums.

Safety data sheet

Regional SDS information is available on request.

Discover more at

www.luxfermeltechnologies.com

† The information contained within is meant as a guideline only

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