

Monoclinic Zirconias for Electrical and Electronic Applications

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.

E101 is the highest purity.

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
- MLCC

Chemical composition (typical values)

Table 1.

Grade	SiO ₂ (wt. %)	TiO ₂ (wt. %)	Fe ₂ O ₃ (wt. %)
E15	0.12	0.15	0.01
E20	0.12	0.15	0.01
E101	0.01	0.01	0.005

Physical properties (typical values)

Table 2.

Grade	Average particle size (µm)	Average surface area (m ² .g ⁻¹)
E15	0.5	5.5
E20	1.5	5
E101	0.7	22

Packaging

Standard packaging is 100 kg packed into poly-lined fiber-board drums for E15 and E20. 50 kg packed into poly-lined fiber-board drums for E101.

Safety data sheet

Regional SDS information is available on request.

Discover more at

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