

# 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 electrical and electronic 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, surface areas and levels of purity.

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 electroceramics
- PZT
- · Oxygen sensors
- MLCC

## Chemical composition (typical values)

Grade	TiO <sub>2</sub> (wt%)	SiO <sub>2</sub> (wt%)	Fe <sub>2</sub> O <sub>3</sub> (wt%)
E15	0.15	0.12	0.01
E20	0.15	0.12	0.01
E30	0.15	0.12	0.01
E101	0.01	0.01	0.005

## Physical properties (typical values)

Grade	Average particle size (µm)	Average surface area (m².g-¹)
E15	0.6	5
E20	1.5	4
E30	16	5
E101	0.8	22

### **Packaging**

Standard packaging is 100 kg packed into poly-lined fibre-board drums for E15, 20 and 30. 50 kg packed into poly-lined fibre-board drums for E101.

### Safety data sheet

Regional SDS information is available on request.

### Discover more at

# www.luxfermeltechnologies.com



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<sup>†</sup> The information contained within is meant as a guideline only