

Standard Monoclinic Zirconia

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
- Glass additive
- Ceramic pigments
- Refractories and insulation
- Abrasives and polishing

Chemical composition (typical values)

Table 1.

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

Physical properties (typical values)

Table 2.

Grade	Average particle size (µm)	Average surface area (m ² .g ⁻¹)
S	16	3–5
SC15	0.5	3.5
E15	0.5	5.5
E20	1.5	5
MS2	0.8	4
MS5	1.0	4.5

Packaging

Standard packaging is 100 kg packed into poly-lined fiber-board drums or 1000 kg bulk bags.

Safety data sheet

Regional SDS information is available on request.

Discover more at

www.luxfermeltechnologies.com

lmcsus@luxfer.com | lmcs@luxfer.com

Follow us on 

Copyright © Luxfer MEL Technologies. The information provided within this document is aimed to assist manufacturers and other interested parties in the use of Luxfer MEL Technologies products. Luxfer MEL Technologies accepts no liability in whole or in part from use and interpretation of the data herein. All information is given in good faith but without warranty. Freedom from patent rights must not be assumed. Health and Safety information is available for all Luxfer MEL Technologies products. **DS-1079-0626-V1**

Luxfer MEL Technologies
Elektron Technology Centre
Lumns Lane, Manchester, M27 8LN, UK
T +44 (0) 161 911 1000

Luxfer MEL Technologies
500 Barbertown Point Breeze Road
Flemington, NJ 08822, USA
T +1 908 782 5800