

MELsperse™ Undoped Zirconia Nano Dispersions

Luxfer MEL Technologies MELsperse range are high purity, crystalline aqueous dispersions of zirconium oxide. The dispersions are available in two different particle size ranges.

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

Features

Fully aqueous based dispersions, offering a more sustainable solvent choice.

Low viscosity dispersions.

Acidic pH with no additional stabilizers.

Applications

Depending on the specific composition and solids content used, MELsperse nano dispersions are commonly used in:

- Coatings
- Filtration
- Abrasives
- Polishing applications
- Sintering aids

Chemical composition (typical values)

Table 1.

Grade	SiO ₂ (wt. %)	TiO ₂ (wt. %)	Fe ₂ O ₃ (wt. %)
All grades	0.02	0.02	0.01

Physical properties (typical values)

Table 2.

Grade	Z-Avg (nm)	Solids content (wt. %)	pH
MELsperse 50	50	20–25	2–3
MELsperse 50C	50	55–60	3–4.5
MELsperse 100	100	20–25	2–3

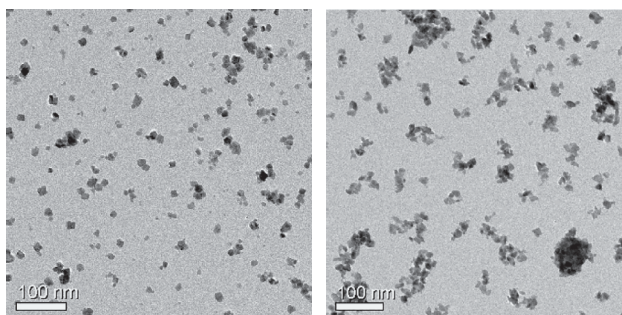


Figure 1. Primary particles of MELsperse 50 (Left) and MELsperse 100 (right).

Packaging

- Standard packaging is 5 or 25 kg UN approved containers
- Bulk quantities available upon request

Safety data sheet

Regional SDS information is available on request.

Discover more at

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