

## Ceria Stabilised Zirconia – CeSZ

### Characteristics

- Ceria stabilised Zirconia stabilisation grade 18-Weight-[%].
- Melting point: 2.500°C (4.532°F).
- Molecular weight: 132.02 g/mol.
- Appearance: white powder.
- Radioactivity: <1 Bq/g.

### Application

- High performance ceramic parts.
- Spray powders.
- Investment Cast Facecoats.

### Chemical Analysis

Type	18 CeSZ
ZrO <sub>2</sub>	80.0 – 84.0 wt.[%]
CeO <sub>2</sub>	16.0 – 20.0 wt.[%]

### Purity

Fe, S	<200 ppm	Ni	<20 ppm
Si, Al	<100 ppm	V, Mn, Co, Zn, Sn, Ba	<10 ppm
Ca, Mg, Na, K	<50 ppm	Pb, U (238)	< 5 ppm
Cu	<50 ppm	Bi	< 1 ppm
Ti, Cr	<30 ppm		

### Particle Size Parameters

Standard	Micronised	Fused
D50: 2-10µm	D50: < 2µm	Customised
D100: <50µm	D100: <15µm	

All particle size analysis with laser diffraction method, Microtrac X100, SRA mode or FRA mode.

### Physical Parameters

Surface Area	Customised	from 1 to 20 m <sup>2</sup> /g	BET
Apparent Density	min 5.6 g/cm <sup>3</sup>		
XRD (phase analysis)	Available	On Request	
LOI	<1 wt[%]		



### Packaging

- 20 kg, 25 kg and 50 kg in pails
- 1000 kg and 500 kg in sacks

### Maximum Lot Size

- 1.500 kg

Inspection certificate according to  
DIN EN 10204.3. 1. B.  
Material manufactured in accordance  
with ISO 9001