FINAL
+ADVANCED MATERIALS

TECHNICAL DATA SHEET

Rev. N° 0 - 04.01.2022

2MS.006
Zirconium Oxide Powder ZYP

Application

- Filtration
- Manufacture of oxygen sensors
- Thermal barrier coatings for gas turbines and diesel engines
- Grain growth inhibitor for non-oxide ceramics
- Polishing

Overview

ZYP powder is an ultra-fine, highly reactive powder composed of zirconia stabilised with yttrium oxide. It is made using the original Zircar Process by Zircar Zirconia

Sintering of ZYP powder particles starts around 900°C and it is possible to create zirconia ceramic parts approaching theoretical density using ZYP at only 1,450 °C.

Property

- Extremely high environmental stability
- Stabilized with 10 % yttrium oxide
- Low sintering temperature
- Pre-sintered and binder-free

Technical Data

Property		Unit	ZYP-30	ZYP-40	ZYP-55
Item N°			225-0300	225-0310	225-0320
Nominal Composition	ZrO_2*	Wt %	90	90	90
	Y_2O_3		10	10	10
Trace Impurities		Wt %	< 1	< 1	< 1
Ignition Loss		Wt %	1.8	2.2	3.1
Specific Surface Area		m²/g	25 - 35	35 - 45	50 - 60

*1-2 % weight hafnia (HfO_2) occurs naturally with zirconia (ZrO_2) and does not affect performance.

Physical variables included in this documentation are provided by way of indication only and do not, under any circumstances, constitute a contractual undertaking. Please contact our technical service if you require any additional information.

Final Advanced Materials Sàrl
4 avenue de Strasbourg
68350 Didenheim – France
Tel : +33 (0) 3 67 78 78 78

Final Advanced Materials GmbH
Basler Strasse 115
79115 Freiburg – Deutschland
Tel: + 49 (0) 761 47 87 336

www.final-materials.com

info@final-materials.com