

CY5Z

TECHNICAL DATA SHEET

- 5mol% Y₂O₃ stabilized zirconia powders with high chemical purity
- Good ionic conductivity
- Dispersible spray-dried powder

TYPICAL CHEMICAL ANALYSIS (ppm)

ZrO ₂ +HfO ₂ *	Y ₂ O ₃	Al ₂ O ₃ **	SiO ₂	Na ₂ O	TiO ₂	Fe ₂ O ₃	CaO
91.9%	8%	10	20	25	10	10	20

* by difference

** Al₂O₃: up to 5% for A grade

PRODUCT RANGE: PHYSICAL PROPERTIES

	CY5Z-NS	CY5Z-NA
Al ₂ O ₃	/	up to 5%
SSA / m ² .g ⁻¹	7 +/- 1	
D50 (µm)	0.3 +/- 0.1	
D90 (µm)	< 1.0	
LBD (g/cm ³)	1.3 +/- 0.2	

Analytical method: laser diffraction

APPLICATION PROPERTIES

- Ceramic sintering

	CY5Z-NS	CY5Z-NA
Ceramic density (g.cm ⁻³)	≥ 6.0	≥ 6.0
Sintering temperature (°C)	1500	1450

- Ionic conductivities

Conductivity (S.cm ⁻¹)	CY5Z-NS*	CY5Z-NA**
300°C	4 x 10 ⁻⁶	3 x 10 ⁻⁶
400°C	6.4 x 10 ⁻⁵	5.9x 10 ⁻⁵
800°C	2.5 x 10 ⁻²	2 x 10 ⁻²

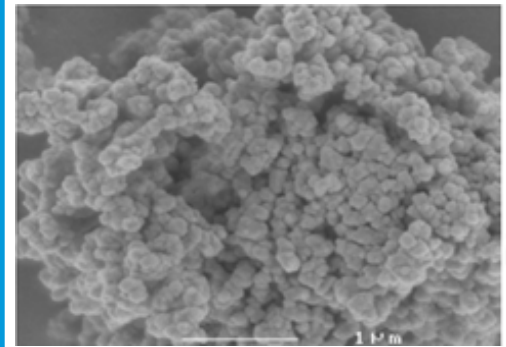
* Sintered 1500°C, 2h

** Sintered 1450°C, 2h

SAFETY DATA SHEET AVAILABLE

PACKAGING

25kg plastic drums
Other packaging upon request



MAIN APPLICATIONS

- Oxygen sensors

CERAMIC PROPERTIES

- Good ionic conductivity
- High sintering ability achievable
- Fine microstructure

Saint-Gobain ZirPro is the expert in zirconia-based materials for industrial applications. From our global network of manufacturing, commercial and research facilities, we serve leading customers through long-term and trust-based relationships.

Saint-Gobain ZirPro (Handan) Co., Ltd.
N°8 Century Street
Economic Development Zone
056107 Handan - Hebei
China

Tel.: +86 31 08 06 60 02
Fax: +86 31 08 06 60 25

SEPR Saint-Gobain ZirPro
B.P. 60025 - 84131 Le Pontet Cedex
France

Tel.: +33 (0)4 90 32 70 71
Fax: +33 (0)4 90 32 70 61
e-mail: zirpro@saint-gobain.com

<http://www.zirpro.com>