



GNP Graystar

Specialty Materials

AN ISO 9001 CERTIFIED COMPANY



TECHNICAL DATA SHEET

Magnesia-Stabilized Zirconia Powder

Typical Chemistry & Properties

	GNPZ01 Powder	GNPZ02 RTP
% ZrO ₂ + HfO ₂	96	96
% MgO	3.2	3.2
% Al ₂ O ₃ max.	0.02	0.02
% SiO ₂ max.	0.2	0.2
% Fe ₂ O ₃ max.	0.02	0.02
% TiO ₂ max.	0.1	0.1
% CaO	0.02	0.02
Moisture	0.2	0.2
L.O.I.	0.2	0.3
Color	Yellow	Yellow

Typical Physical Properties

Sintered Density	5.75 g/cm ³
Vickers Hardness	1275 MPa
Fracture Strength (K1C)	6.8 MPa x m ^{1/2}
Sintering Shrinkage	19 %
Sintering Temperature	1700°C

Description:

This Mg-PSZ materials is available in powder and ready-to-press spray dried powder. GNPZ01 is the original powder and the GNPZ02 is the spray granulated ready-to-press powder to meet different customers' needs.

Applications:

GNP Graystar's Mg-PSZ is best used for textile ceramic pieces, high temperature steam valves, wire drawing dies, pulley cones, thermocouple protection tubes, oxygen probe protection tubes, etc.

info@GNPGraystar.com

Rev. 02/2020

Northern Office
37 John Glenn Dr.
Amherst, NY 14228
716.759.6600

www.GNPGraystar.com

Southern Office
9 Simmonsville Rd.
Bluffton, SC 29910
843.815.5600