

**NS6130-02-291**

# YTTRIA STABILIZED ZIRCONIA

## Nanoparticles

### Quick Facts

Product	:	Yttria Stabilized Zirconia Nanoparticles
Stock No	:	NS6130-02-291
CAS	:	1314-23-4
Molecular Formula	:	ZrO <sub>2</sub> -Y <sub>2</sub> O <sub>3</sub>
Form	:	Powder

**Purity**  
99.9%

### Technical Specification

Molecular Weight	Density	Melting Point	APS
349.03g/mol	1.8-2.3 g/cm <sup>3</sup>	N/A	<100nm

Yttria-stabilized zirconia (YSZ) is a ceramic in which the cubic crystal structure of zirconium dioxide is made stable at room temperature by an addition of yttrium oxide.

### Application

- ✓ Micro-ceramics, advanced ceramic applications and in film or thermal coatings
- ✓ Textiles, nanofibers and nanowires
- ✓ Solid oxide fuel cell (SOFC) electrolyte microlayers
- ✓ Tooth crowns
- ✓ Refractor(jet engines)
- ✓ As a thermal barrier coating in gas turbines



**ZrO<sub>2</sub>-Y<sub>2</sub>O<sub>3</sub>**  
APS <100nm



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20ZICE4589C



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ISO 9001:2015  
CERTIFIED COMPANY

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