

## **Technical Data Sheet**

# ACS Material Cerium Oxide (CeO<sub>2</sub>)

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#### **Contact Information:**

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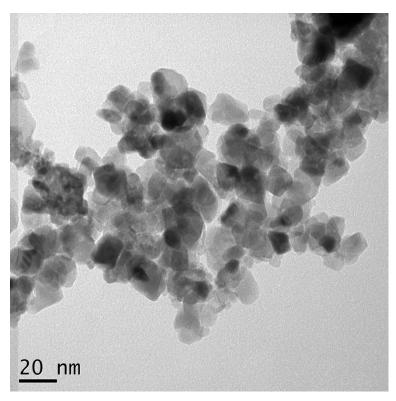
Revision: 012419

# 1. Preparation Method

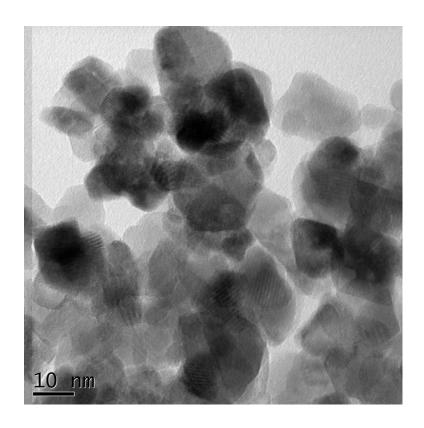
NA

### 2. Characterizations

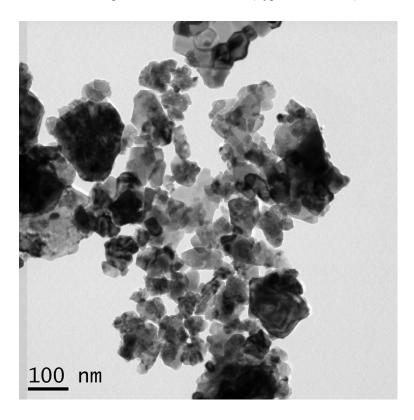
Type:	Type A	Type B
Purity:	>99.99%	>99.99%
Particle Size:	10-30 nm	50-80 nm
BET Surface Area:	$\sim 60 \text{ m}^2/\text{g}$	$\sim 30 \text{ m}^2/\text{g}$
<b>Apparent Density:</b>	1.6 g/cm <sup>3</sup>	1.6 g/cm <sup>3</sup>
Concentration (ppm):	La <sub>2</sub> O <sub>3</sub> (REO): ≤0.03	La <sub>2</sub> O <sub>3</sub> (REO): ≤0.03
	Pr <sub>6</sub> O <sub>11</sub> (REO): ≤0.04	Pr <sub>6</sub> O <sub>11</sub> (REO): ≤0.04
	Fe <sub>2</sub> O <sub>3</sub> : ≤0.01	Fe <sub>2</sub> O <sub>3</sub> : ≤0.01
	SiO <sub>2</sub> : ≤0.02	SiO <sub>2</sub> : ≤0.02
	CaO: ≤0.01	CaO: ≤0.01
	Al <sub>2</sub> O <sub>3</sub> : ≤0.02	Al <sub>2</sub> O <sub>3</sub> : ≤0.02



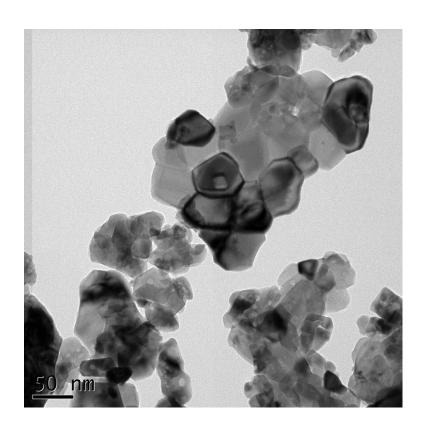
TEM Image of ACS Material CeO<sub>2</sub> (Type A: 10-30 nm)



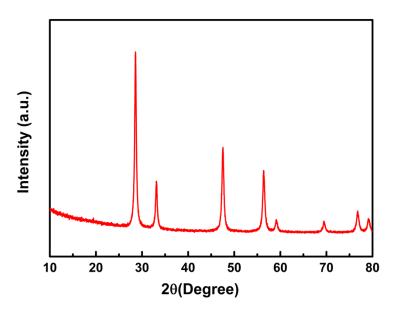
TEM Image of ACS Material CeO<sub>2</sub> (Type A: 10-30 nm)



TEM Image of ACS Material CeO<sub>2</sub> (Type B: 50-80 nm)



TEM Image of ACS Material CeO<sub>2</sub> (Type B: 50-80 nm)



XRD Analysis of ACS Material Cerium Oxide (CeO<sub>2</sub>)

#### 3. Application Fields

• High efficiency catalyst, manufacture phosphors and precision polishing, chemical additives, electronic ceramics, structural ceramics, UV absorbers, battery materials, *etc*.

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