

## NANOMYTE® SOX-25 (micro-grade LLZO)

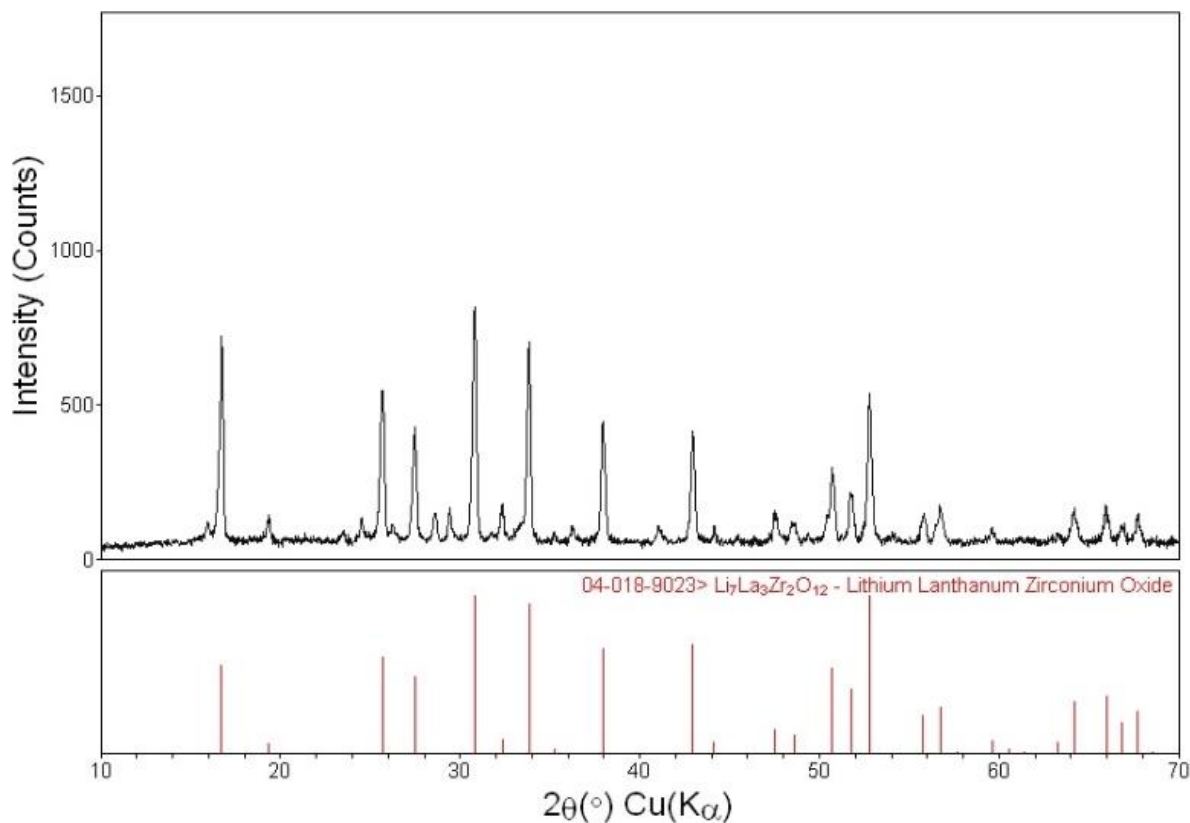
### Physical Characteristics

<b>Product Description:</b>	Al-Doped Lithium Lanthanum Zirconium Oxide
<b>Chemical Formula:</b>	$\text{Li}_{6.24}\text{La}_3\text{Zr}_2\text{Al}_{0.24}\text{O}_{11.98}$
<b>Color:</b>	White
<b>Phase Purity:</b>	> 95%
<b>Average Particle Size (D50):</b>	5 – 6 $\mu\text{m}$
<b>Crystal Structure:</b>	Cubic
<b>Crystal Density:</b>	5.093 $\text{g}/\text{cm}^3$
<b>Specific Surface Area:</b>	0.50 $\text{m}^2/\text{g}$
<b>Ionic Conductivity:</b>	$10^{-5}$ to $10^{-4}$ S/cm (unsintered, cold-pressed pellet @ RT)
	<i>*Sintered material will have higher ionic conductivity</i>

### Operating Conditions

<b>Stability Voltage Window:</b>	~ 5.0V vs. Li/Li+
<b>Sensitivity to Air or Moisture:</b>	Stable in dry air, but limit exposure to air/ $\text{CO}_2$
<b>Recommended Working Atmosphere:</b>	Air

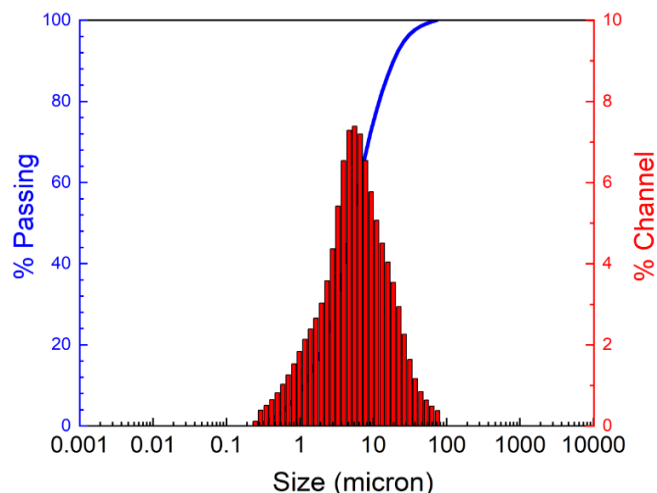
### Characterization Data



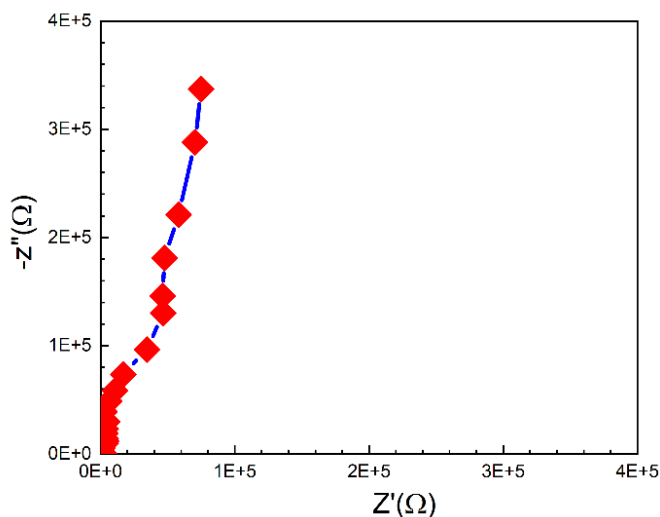
X-ray Diffraction (XRD)

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### Characterization Data (continued)



Particle Size Distribution



Ionic Conductivity

### Storage & Handling

#### Precautions for Safe Handling

Handle in a controlled environment, under inert gas. Appropriate personal protective equipment should be used at all times. Avoid contact with eyes and skin. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Avoid breathing dust.

#### Conditions for Safe Storage

Keep container tightly sealed, in a cool, dry place under inert gas. This material is moisture and air sensitive. Protect from humidity and keep away from water. Keep away from oxidizing agents. Store in a locked cabinet or with access restricted to technical experts or their assistants.

**Refer to SDS for complete information on the safe handling of this material.**

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