

# CLEARTONE ZR

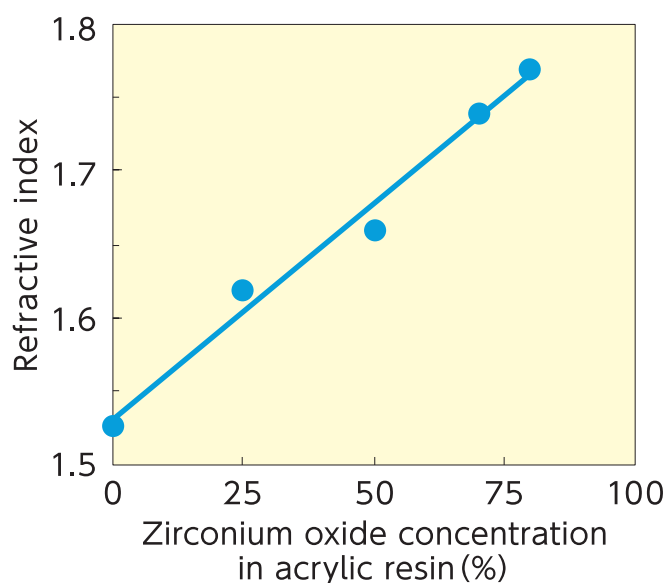
## Dispersion of zirconia nanoparticles

Reference exhibit

### Application example

- Coating materials for improving refractive index
- Anti-refraction coating and index matching material
- For optical devices such as diffraction grating and lenses

### Excellent in transparency and refractive index



Haze	Total transmittance	Thickness
<b>Below 1.0%</b>	<b>Over 95%</b>	<b>About 5<math>\mu</math>m</b>

**CLEARTONE ZR**

**○ Clear**

Conventional

**× Turbidity**

Dispersibility with acrylic resin

### Good dispersibility in various organic solvents, good compatibility with resins

Applicable materials	Type	ZrO <sub>2</sub> concentration
Methyl ethyl ketone	Solvent	30wt%
Toluene		30wt%
Propylene glycol monomethyl ether		20wt%
$\gamma$ -Butyrolactone		20wt%
2-Ethylhexyl acrylate	Acrylic resin	30wt%
Trimethylolpropane triacrylate		30wt%
Polybutyl acrylate		30wt%
Dicyclopentadiene diepoxide	Epoxy resin	30wt%
p-tert-Butylphenyl glycidyl ether		30wt%
3,4-Epoxy cyclohexylmethyl-3,4-epoxy cyclohexanecarboxylate		30wt%