

クリアートーンZR

CLEARTONE ZR

参考出展

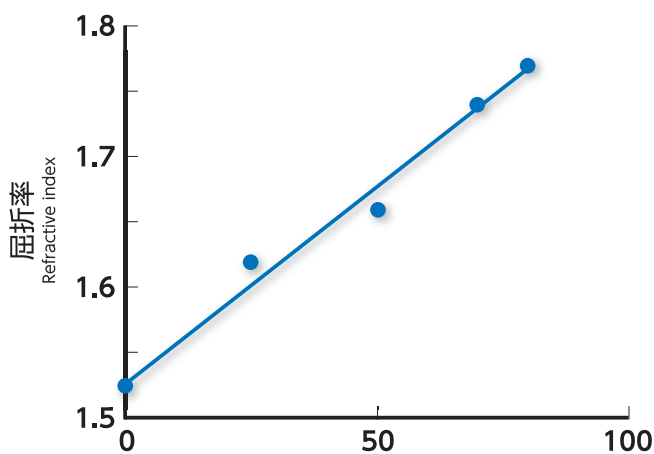
Reference exhibit

用途例
Application
Example

- コーティング材料の屈折率向上
As coating materials for improving refractive index
- 反射防止膜や屈折率整合剤
As anti-reflection coating and index matching materials
- 回折格子やレンズなどの光学部品
As optical devices such as diffraction grating and lenses

屈折率が高い

High refractive index



アクリル樹脂中のZrO₂濃度 (%)
Zirconium oxide concentration in acrylic resin

アクリル樹脂中のZrO₂濃度と屈折率の関係

Relationship between zirconium oxide concentration in acrylic resin and refractive index

ヘイズ
Haze

1.0%以下
Below 1.0%

全光線透過率
Total transmittance

95%以上
Over 95%

膜厚
Thickness

5 μm
5 μm

透明性が高い

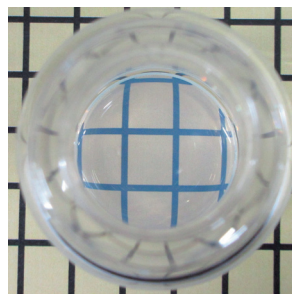
High transparency

アクリル樹脂との相溶性比較

Dispensibility with acrylic resin

ZrO₂濃度30%のアクリルモノマー分散液の外観を評価
Mix with acryl monomer (ZrO₂ concentration: 30%)

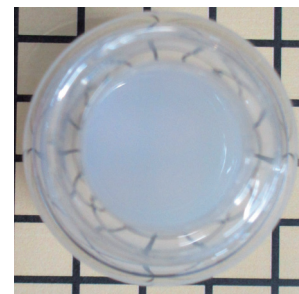
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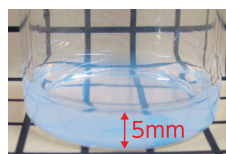
Top view

○ 透明
Clear

従来品
Conventional



× 白濁
Turbidity



Side view

溶剤・樹脂との相溶性が良好

High dispersibility into various solvents and resins

対象有機化合物名 Applicable materials	種類 Type	ZrO ₂ wt%
Methyl ethyl ketone	溶剤 Solvent	30
Toluene		30
Propylene glycol monomethyl ether		20
γ-Butyrolactone		20
2-Ethylhexyl acrylate	アクリル Acrylic resin	30
Trimethylolpropanetrimethacrylate		30
Polybutyl acrylate		30
Dicyclopentadiene diepoxide	エポキシ Epoxy resin	30
p-tert-Butylphenyl glycidyl ether		30
3,4-Epoxy cyclohexylmethyl 3',4'-epoxy cyclohexanecarboxylate		30