

**O-101 Oxide Mixture (Sc₂O₃+Al₂O₃), 99.9% Crystal Granules 3~12mm
(substitute for Al₂O₃ and MgO) New Medium Index material.**

Melting Point	1700°C
Transmission Range	0.25~10 micron
Refractive Index	n=1.68 (500nm)
Density	4.9 g/cm ³
Evaporation Temperature	2100°C
Substrate Temperature	60~250°C
Rate of Condensation	10~20A ⁰ /sec
Recommended Source	Water cooled copper crucible by electron beam gun

This is a new medium index material substitute for Al₂O₃ and MgO, which it is better adhesion and steadier index than Al₂O₃ and MgO. You don't need to heat when you coat cold substrate, no need to supply oxygen for this material. People coat ZnS+MgF₂, which they found adhesion problem and film is crack. It is can be used after MgF₂ layer. The films are better transparent and compact. File is like ZnS+MgF₂+our Sc₂O₃ oxide mixture or ZnS+MgF₂+our Sc₂O₃ oxide mixture+MgF₂. It shows good adhesion for layer thickness. This is a stabilized material to increase film durable and get index steadier between high index and low index.

Application: A.R. Multi-layer coating.

