

T-601	Ti ₃ O ₅ , 99.9%	Highly Sintered Tablet ϕ 8~10x5~7mm
T-602	Ti ₃ O ₅ , 99.9%	Highly Sintered Granules 3~6mm
T-603	Ti ₃ O _{5p} , 99.99%	Pre-melted Granules 3~10mm
T-604	Ti ₃ O ₅ , 99.99%	Sparkling Crystal Granules 1~3mm

Melting Point	1700°C
Transmission Range	0.4~12 micron
Refractive Index	n=2.2 (500nm)
Density	4.16 g/cm ³
Evaporation Temperature	2200°C
Substrate Temperature	200~250°C
Rate of Condensation	5~10A ⁰ /sec
Recommended Source	Water cooled copper crucible by electron beam gun
Partial Pressure of Supplied Oxygen:	5x10 ⁻³ to 5x10 ⁻² Pa

Advantages of using Ti3O5:

Whenever TiO, Ti2O3 or TiO2 are evaporated, the vapor may consist of various Ti-O combination, which changes as the evaporation continues. The refractive index of the deposited film thus is not constant because most Ti-O materials evaporate incongruently. However, Ti3O5 is evaporated as the starting composition, the only titanium species in the vapor is TiO and the oxygen content in the vapor remains constant.

Our Ti3O5 Crystal granules (T-604) can replace TiO2, TiO, Ti2O3 and other form of Ti3O5. It has the following advantages: No Powder form and no gas release. Coating has good repeatability by using this material. There is no change in film reflectivity when material is in repeatable use. Refractive index is steady, less absorption, less spitting and wide band than Ti2O3 and TiO2. You don't need to pre-melt after first run and evaporate direct refilling it. It saves turn around coating run.

Application: High Index Durable Multi-layers coating.

T-603



T-604

