P-401 PCF, 99.9% Crystal Granules 3~10mm

P-402 PCF, 99.99% Mono-Crystallline Granules 3~10mm

(Possible non-radioactive replacement for Thorium Fluoride

for far IR up to 12 micron)

Melting Point 1280°C

Transmission Range 0.15~15 micron

Refractive Index n=1.48 (500nm); n=1.30(10.6 micron)

Density 4.83 g/cm³ Evaporation Temperature 1100°C Substrate Temperature 175~250°C Rate of Condensation 50~100A°/sec

Recommended Source Molybdenum boat by thermal evaporation.

Molybdenum or graphite crucible by electron beam gun.

Please note P-401 is only used by resistance source with molybdenum boat in IAD chamber. P-402 can be used either by E-gun or Resistance source in IAD chamber.

This is lower index material for far IR coatings up to 12 micron. It has better transparency, lower stress and less absorption than ThF4. Rate of condensation is steadier and the film is compact. Shortage is adhesion and durability. So it is better to use IAD chamber to reduce humidity to get good adhesion and durable film.

Application: IR Multi-layer coatings.

