

NS6130-02-234

YTTRIUM ALUMINATE

Quick Facts

Garnet

Product : Yttrium Aluminate Garnet

Stock No : NS6130-02-234

 $\begin{array}{lll} \text{Purity} & : & 99.5\% \\ \text{Molecular Formula} & : & Y_{_3}\text{Al}_{_5}\text{O}_{_{12}}/\text{Ce} \\ \text{Form} & : & \text{Powder} \end{array}$

Purity 99.5%

Technical Specification

| Molecular Weight | Density | Melting Point | APS |
|------------------|------------|---------------|------|
| 733.73g/mol | 4.55 g/cm³ | 1970°C | 30nm |

Yttrium Aluminate garnet (YAG, Y3Al5O12) Monocrystals. Yttrium Aluminate garnet (YAG) (chemical composition $Y_3A_{15}O_{12}$) is a well-known host material for obtaining highly efficient luminescent materials. Their good chemical and physical properties: the unique cubic structure of garnet and subsequent optically isometric properties as well as excellent chemical stability at elevated temperature. Yttrium Aluminate oxide powder is known for its high thermal stability and insolubility hence it is most suited for ceramic, glass and optic applications. Ceramic structures made using this powder are used in making simple clay bowls to complex electronic components.



- ✓ Used in bulding structural & aerospace
- ✓ Active optical filters
- ✓ Cathode materials for alkaline batteries
- ✓ Pigments for ceramics and glasses
- ✓ Temperature sensors
- ✓ Water treatment and fuel cell applications
- ✓ Used for manufacturing a down converter in white light LEDs.
- ✓ Automotive rear-view mirrors with adjustable reflectance

Y₃Al₅O₁₂/Ce

APS 30nm



Follow us:







I www.nanoshel.com I sales@nanoshel.com







ISO 9001:2015 CERTIFIED COMPANY INTELLIGENT MATERIALS PVT LTD Derabassi Punjab (140507) INDIA

Chapel St Ch CW12 4AB Unite

NANOSHEL UK LIMITED Chapel House, Chapel St Cheshire, CW12 4AB United Kingdom NANOSHELLIC 3422 Old Capitol Suit 1305 Wilmington DE - 19808 United States