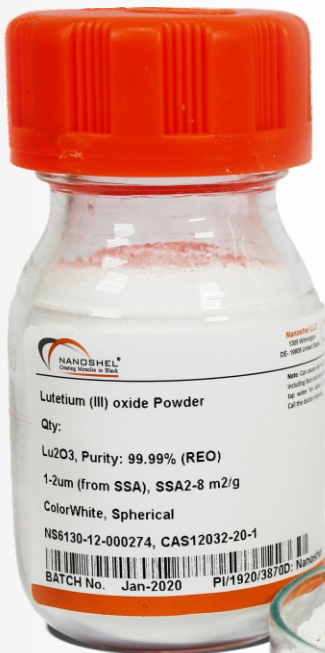


Lutetium III Oxide Powder



NS6130-12-000274

APS
1-2 μ m



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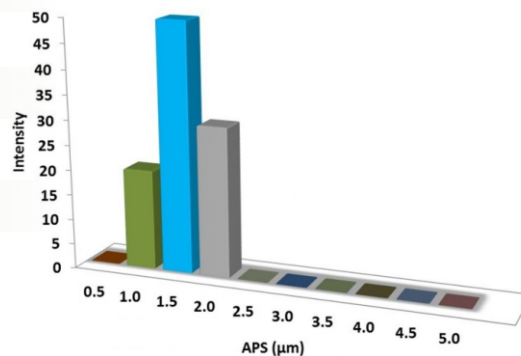
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Lutetium III Oxide Powder

Lutetium (III) oxide is an important raw material for laser crystals. It also has specialized uses in ceramics, glass, phosphors, and lasers. Lutetium (III) oxide is used as a catalyst in cracking, alkylation, hydrogenation, and polymerization. Lutetium oxide has a cubic crystal structure. 2487°C is the melting point, which is quite high enough for lutetium oxide compounds. Due to lutetium oxide's air sensitivity, lutetium oxide is compatible with strong oxidizing agents. Therefore, there is a need for lutetium oxide to be avoided from moisture and carbon dioxide. Moreover, lutetium oxide is one of the promising laser host materials for high power and ultrashort pulse lasers. Lutetium oxide has a wide band gap (5.5 eV).

Quick Facts

Product	:	Lutetium III Oxide Powder
Stock No	:	NS6130-12-000274
CAS	:	12032-20-1
Purity	:	99.99%
Color	:	White
Form	:	Powder



Technical Specification

Formula	APS	Molecular Weight	Melting Point
Lu ₂ O ₃	1-2µm	397.94g/mol	2,420 °C

Chemical Composition

Product	Weight Percent (nominal)	
	Lu ₂ O ₃	Other Metal
Lutetium III Oxide Powder	99.99%	

Applications

- Superconducting materials
- Laser materials
- Catalysts
- Ceramics and glass