













Erbium Oxide Powder

Erbium oxide possesses excellent electrical, optical and photoluminescence properties. They are graded as irritants, and can cause serious eye irritation. These particles are insoluble in water, and moderately soluble in strong mineral acids. The applications of Er2O3 are varied due to their electrical, optical and photoluminescence properties. Nanoscale materials doped with Er+3 are of much interest because they have special particle-sizedependent optical and electrical properties. Erbium oxide doped nanoparticle materials can be dispersed in glass or plastic for display purposes, such as display monitors. The spectroscopy of Er+3 electronic transitions in host crystals lattices of nanoparticles combined with ultrasonically formed geometries in aqueous solution of carbon nanotubes is of great interest for synthesis of photoluminescence nanoparticles in 'green' chemistry. Erbium oxide is among the most important rare earth metals used in biomedicine. The photoluminescence property of erbium oxide nanoparticles on carbon nanotubes makes them useful in biomedical applications.

Quick Facts



Technical Specification

Formula	APS	Molecular Weight	Melting Point
Er ₂ O ₃	20-30µm	382.56 g/mol	2344° C

Chemical Composition

Product	Weight Percent (nominal)	
	Er ₂ O ₃	Other Metal
Erbium Oxide Powder	>99.99%	0.1%

Applications

- Biomedical applications
- Photoluminescence applications
- Optical applications
- Display monitors







Punjab (140507) INDIA

NANOSHEL UK LIMITED

Chapel House, Chapel St Cheshire, CW12 4AB United Kingdom

NANOSHEL LLC 3422 Old Capitol Suit

+1 646 470 4911

1305 Wilmington DE - 19808 United States





