

GADOLINIUMOXID (Gd₂O₃)



This odorless white solid was first identified in Created in 1886 from the rare mineral Samarskite. Today gadolinium oxide is obtained mainly from ytter earth minerals such as Xe not im. In the continental crust of the earth the rare earth is relatively rare. Their share there is about 6.2 parts per million (ppm).

Industry uses gadolinium oxide as a basic element for phosphors, for specialty optical glasses with high refractive index and in nuclear reactor control rods. Also in medicine uses the rare earth, namely as a contrast medium for examinations in magnetic resonance imaging. As a component of gadolinium gallium garnet, this rare earth is also used for data storage in computers essential.

GROWTH MARKETS

- Microwave applications
- Radar technology
- Contrast agent in the magnetic Resonance Tomograph
- Optomagnetic data storage
- Cooling devices
- X-ray technology

Flow Rate and annual World Production



Annual production worldwide:

400 tons'

World annual production:

75 tons'

The amount of rare earths required worldwide is according to BGR from 131,500 tons in 2020 to 188,300 tons will increase in 2030. A supply bottleneck is emerging here for the future.