

# **Technical Data Sheet**

# Dysprosium(III)oxide powder

Date Issued: 2019-08-13

# 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING

Product name Dysprosium(III)oxide powder

Product code NO-0019--UP

Supplier IoLiTec

Ionic Liquids Technologies GmbH

Salzstrasse 184

D-74076 Heilbronn

Germany

**Telephone** +49 (0)7131 - 898390

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#### 2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name Dysprosium(III)oxide

**CAS No.** 1308-87-8

**Empirical Formula** Dy<sub>2</sub>O<sub>3</sub>

Molecular weight 373.00 amu

Purity 99.9 %

Average Particle Size 55 nm

Specific Surface Area 20 m<sup>2</sup>/g

Colour white

**Morphology** nearly spherical

Bulk Density $0.44 \text{ g/cm}^3$ True Density $7.81 \text{ g/cm}^3$ 

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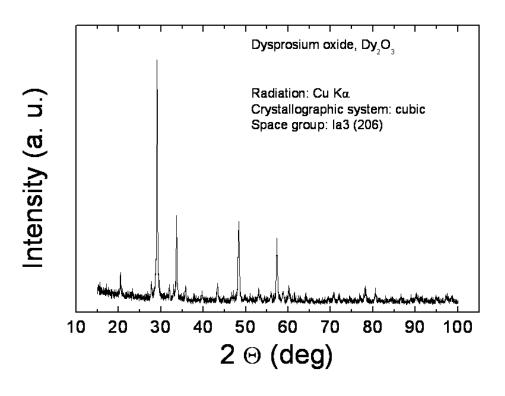
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### 3 POTENTIAL APPLICATIONS OF DY<sub>2</sub>O<sub>3</sub> NANOPOWDERS

- Dopants for fluorescent Materials
- Luminescence
- Magneto-optical recording materials
- Materials with a large magnetostriction
- Measurement of neutron energy-spectrum
- Nuclear reaction control rods
- Neutron absorbents

#### **4 X-RAY DIFFRACTION PATTERN**



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#### **5 ORDER INFORMATION**

Dy<sub>2</sub>O<sub>3</sub> NO-0019-HP can be obtained in the following standard quantities.

Quantity	Price
25 g	Please enquire
50 g	Please enquire
100 g	Please enquire
500 g	Please enquire
1 kg	Please enquire

Please send your order via email to <a href="mailto:order@nanomaterials.iolitec.de">order@nanomaterials.iolitec.de</a> or fax +49 (0)7131 – 89839109.

#### **6 OTHER INFORMATION**

#### DISCLAIMER

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