

Technical Data Sheet

Yttrium (III) oxide

Revision Date: 12/11/2009

Date Issued: 03/01/2007

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

Product name Yttrium (III) oxide, Nanopowder
Product code NO-0030-HP
Supplier IoLiTec
Ionic Liquids Technologies GmbH
Salzstrasse 184
D-74076 Heilbronn
Germany
Telephone +49 (0)7131 - 898390
Fax +49 (0)7131 - 89839109
Emergency telephone +49 (0)179 - 5322578

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name Yttrium (III) oxide
CAS No. 1314-36-9
Empirical Formula Y_2O_3
Molecular weight 225.81 amu
Purity 99.9 % (REO)
Average Particle Size 30-50 nm (from SSA)
Specific Surface Area 33-37 m²/g
Colour white
Morphology spherical
Bulk Density 0.29 g/cm³
True Density 5.03 g/cm³

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3 TYPICAL SPECIFICATIONS

Components		Contents (%)
REO	CeO ₂	< 0.001
	Dy ₂ O ₃	< 0.001
	Eu ₂ O ₃	< 0.005
	Gd ₂ O ₃	< 0.001
	Ho ₂ O ₃	< 0.001
	La ₂ O ₃	< 0.001
	Lu ₂ O ₃	< 0.001
	Nd ₂ O ₃	< 0.001
	Pr ₆ O ₁₁	< 0.001
	Sm ₂ O ₃	< 0.001
	Tb ₄ O ₇	< 0.001
	Tm ₂ O ₃	< 0.001
	Yb ₂ O ₃	< 0.001
Non-REO	CaO	< 0.003
	CuO	< 0.001
	Fe ₂ O ₃	< 0.002
	NiO	< 0.001
	PbO	< 0.001
	SiO ₂	< 0.01

Analytical Technique: Inductively coupled plasma (ICP)

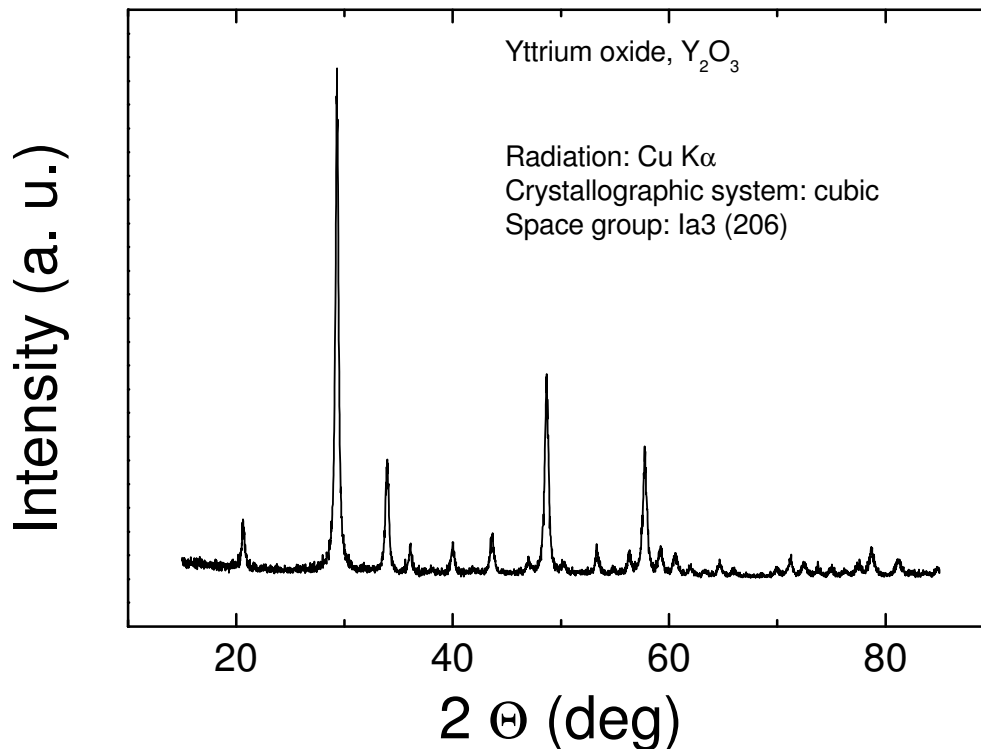
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4 X-RAY DIFFRACTION PATTERN



5 ORDER INFORMATION

Y_2O_3 can be obtained in the following standard quantities.

Quantity	Price
100 g	Please enquire
500 g	Please enquire
1 kg	Please enquire
5 kg	Please enquire
bulk	Please enquire

Please send your order via email to order@nanomaterials.iolitec.de

or fax +49 (0)7131 – 89839109.

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6 OTHER INFORMATION

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