

Technical Data Sheet

Bismuth(III)oxide

Revision Date: 12-17/2008

Date Issued: 03-01/2007

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

| | |
|----------------------------|---|
| Product name | Bismuth(III)oxide, Nanopowder |
| Product code | NO-0016-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 | Bismuth(III)oxide |
| CAS No. | 1304-76-3 |
| Empirical Formula | Bi ₂ O ₃ |
| Molecular weight | 465.96 amu |
| Purity | 99.8+% |
| Average Particle Size | 90-210 nm |
| Specific Surface Area | ~3.5 m ² /g |
| Colour | Yellow |
| Morphology | Spherical |
| Bulk Density | 0.5-1.1 g/cm ³ |
| True Density | 8.9 g/cm ³ |

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Melting point 822-828 °C

Boiling point 1819 °C

3 SPECIFICATIONS

| Components | Content (wt.%) |
|------------|----------------|
| Ag | ≤ 0.002 |
| Ca | ≤ 0.001 |
| Cu | ≤ 0.0006 |
| Fe | ≤ 0.0002 |
| K | ≤ 0.005 |
| Pb | ≤ 0.007 |
| Sb | ≤ 0.0003 |
| Te | ≤ 0.0002 |
| Zn | ≤ 0.0002 |

4 TRANSMISSION ELECTRON MICROSCOPY

N/A

5 X-RAY DIFFRACTION PATTERN

N/A

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6 ORDER INFORMATION

7 OTHER INFORMATION

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