

# Technical Data Sheet

## alpha-Aluminium oxide

Revision Date: 04/17/2024

Date Issued: 04/17/2024

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

<b>Product name</b>	Aluminium oxide powder
<b>Product code</b>	NO-0008-UP
<b>CAS</b>	1344-28-1
<b>Supplier</b>	IoLiTec Ionic Liquids Technologies GmbH Im Zukunftspark 9 D-74076 Heilbronn Germany
<b>Telephone</b>	+49 (0)7131 - 898390
<b>Fax</b>	+49 (0)7131 - 89839109
<b>Emergency telephone</b>	+49 (0)151-41255671

### 2 COMPOSITION / INFORMATION ON INGREDIENTS

<b>Ingredient name</b>	Aluminium oxide, alpha
<b>CAS No.</b>	1344-28-1
<b>Empirical Formula</b>	Al <sub>2</sub> O <sub>3</sub>
<b>Molecular weight</b>	101.96 g/mol
<b>Purity</b>	99.85%
<b>Phase Structure</b>	100% alpha
<b>Grain Size</b>	~ 40 nm (X-ray)
<b>Average Particle Size</b>	150 nm (BET)
<b>Specific Surface Area</b>	~ 10 m <sup>2</sup> /g (SEM)
<b>Relative Density</b>	3.97 g/cm <sup>3</sup>

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**Melting point** 2045°C

**Boiling point** 2980°

### 3 CONTENT OF IMPURITIES

Impurity	Content
B <sub>2</sub> O <sub>3</sub>	0.001 wt%
CaO	0.02 wt%
Fe <sub>2</sub> O <sub>3</sub>	0.01 wt%
MgO	0.1 wt%
Na <sub>2</sub> O	0.07 wt%
SiO <sub>2</sub>	0.02 wt%

### 4 OTHER INFORMATION

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