



MARTOXID® MRS-1

Aluminum Oxide

Einsatzbeispiele / Applications

Oxidkeramik mit hohen Al_2O_3 -Gehalten, insbesondere für mechanisch, thermisch, chemisch und elektrisch extrem belastbare keramische Komponenten; Hochleistungszündkerzen, Substrate und ballistische Anwendungen.

Oxide ceramics of high Al_2O_3 -content, subjected to extremely high mechanical, thermal, chemical and electrical loads; high efficiency spark plugs, substrates and armor protection.

Durchschnittsanalyse / Typical analysis

| | | |
|--|----------------------------|-----------|
| Al_2O_3 | [%] | ≈ 99.8 |
| Na_2O total | [%] | ≤ 0.04 |
| CaO | [%] | ≤ 0.04 |
| Fe_2O_3 | [%] | ≤ 0.04 |
| SiO_2 | [%] | ≤ 0.10 |
| $\alpha\text{-Al}_2\text{O}_3$ | [%] | ≥ 95 |
| Glühverlust / Loss on Ignition | [%] | ≤ 0.1 |
| Spezifische Oberfläche / Specific Surface Area (BET) | [m^2/g] | 2.0 – 4.0 |
| Schüttdichte / Bulk Density | [kg/m^3] | ≈ 800 |
| Primärkorn / Primary Crystal | [μm] | 1.0 – 1.4 |
| Pressdichte/Pressed Density [100 MPa] | [kg/m^3] | ≥ 2.20 |
| Sinterdichte/Sintered Density [1600°C/2h] | [kg/m^3] | ≥ 3.15 |
| Korngrößenverteilung / Particle Size Distribution (Laser granulometer Cilas 1064) | | |
| | d_{10} [μm] | 0.4 – 0.6 |
| | d_{50} [μm] | 1.1 – 1.6 |
| | d_{90} [μm] | 2.5 – 4.5 |

Shipping Information

Packaging and minimum order quantity information is available from sales or customer service.

Safety and Handling Information

For specific safety, toxicity and handling information, please refer to the material safety data sheet on this product.

Chemical Registration Numbers

| | |
|---------------------------------|-------------------------|
| Chem. Bezeichnung / Chem. name: | Aluminiumoxid |
| Formel / formula: | Al_2O_3 |
| CAS No.: | 1344-28-1 |
| EC/EINECS No.: | 215-691-6 |
| UN-Nr.: | --- |

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