

# Technical Data Sheet

Zirconium carbide powder

Revision Date: 8/13/202

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

|                            |                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------|
| <b>Product name</b>        | Zirconium carbide powder                                                                        |
| <b>Product code</b>        | NC-0013-SG                                                                                      |
| <b>CAS</b>                 | 12070-14-3                                                                                      |
| <b>Supplier</b>            | IoLiTec<br>Ionic Liquids Technologies GmbH<br>Im Zukunftspark 9<br>D-74076 Heilbronn<br>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>       | Zirconium carbide      |
| <b>CAS No.</b>               | 12070-14-3             |
| <b>Empirical Formula</b>     | ZrC                    |
| <b>Molecular weight</b>      | 103.23 g/mol           |
| <b>Purity</b>                | 97%                    |
| <b>Hafnium content</b>       | ~ 3%                   |
| <b>Morphology</b>            | spherical              |
| <b>Average Particle Size</b> | < 60 nm                |
| <b>Specific Surface Area</b> | > 70 m <sup>2</sup> /g |
| <b>Relative Density</b>      | 6.73 g/cm <sup>3</sup> |
| <b>Bulk Density</b>          | 0.08 g/cm <sup>3</sup> |

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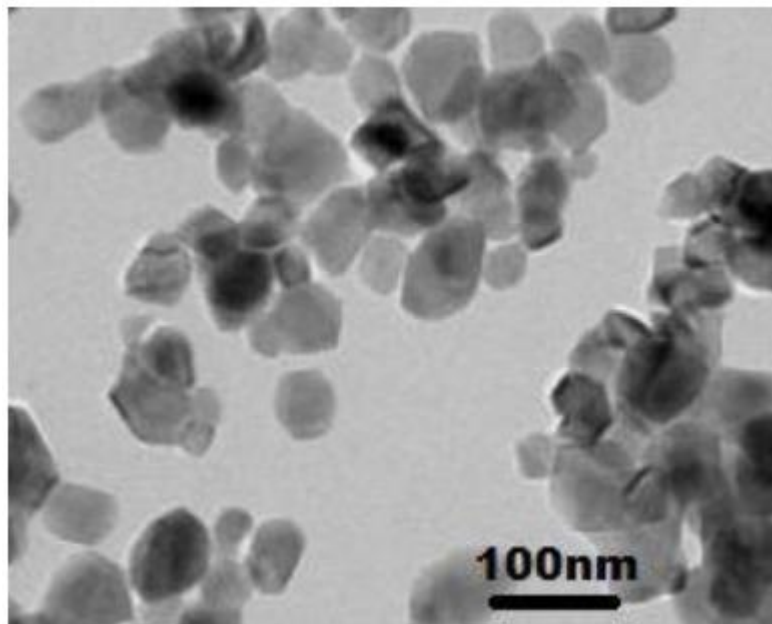
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## 3 CONTENT OF IMPURITIES

| Impurity       | Content |
|----------------|---------|
| C <sub>f</sub> | ≤ 0.5%  |
| O              | ~ 1.0%  |
| Cl             | ≤ 0.2%  |
| Si             | ≤ 0.10% |
| Fe             | ≤ 0.05% |
| Ni             | ≤ 0.05% |

## 4 TEM IMAGE



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## 5 OTHER INFORMATION

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