

# Technical Data Sheet

## Titanium carbide

Revision Date: 31/03/2025

Date Issued: 31/03/2025

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

<b>Product name</b>	Titanium carbide powder
<b>Product code</b>	NC-0004-HP
<b>CAS</b>	12070-08-5
<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>	Titanium carbide
<b>CAS No.</b>	12070-08-5
<b>Empirical Formula</b>	TiC
<b>Molecular weight</b>	49.88 g/mol
<b>Purity</b>	>97 %
<b>Morphology</b>	nearly spherical
<b>Crystallographic phase</b>	cubic
<b>Average Particle Size</b>	50 nm
<b>Specific Surface Area</b>	23 m <sup>2</sup> /g
<b>Relative Density</b>	4.93 g/cm <sup>3</sup>

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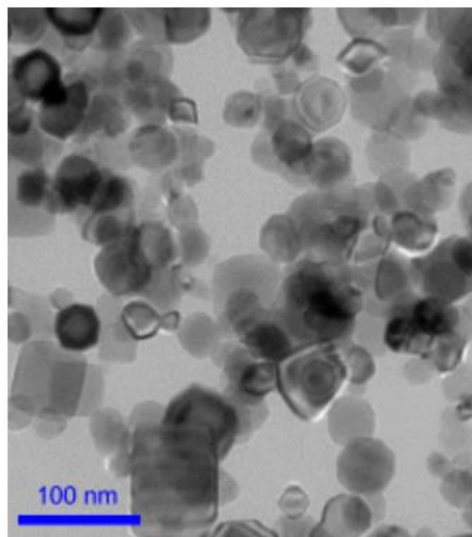
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<b>Bulk Density</b>	< 0.08 g/cm <sup>3</sup>
<b>Melting point</b>	3140°C
<b>Boiling point</b>	4820°C
<b>Synthesis method</b>	plasma CVD

### 3 CONTENT OF IMPURITIES

Impurity	Content
C	≤ 1%
Cl	≤ 1%
Fe	≤ 0.10%
Ni	≤ 0.10%
Cr	≤ 0.20%
Si	≤ 0.20%

### 4 TEM IMAGE



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### 5 OTHER INFORMATION

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