

# Technical Data Sheet

## Iron powder

Date Issued: 2019-08-14

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

<b>Product name</b>	Iron powder
<b>Product code</b>	NM-0019-UP
<b>Supplier</b>	IoLiTec Ionic Liquids Technologies GmbH Salzstrasse 184 D-74076 Heilbronn Germany
<b>Telephone</b>	+49 (0)7131 - 898390
<b>Emergency telephone</b>	+49 (0)176 - 84850874

### 2 COMPOSITION / INFORMATION ON INGREDIENTS

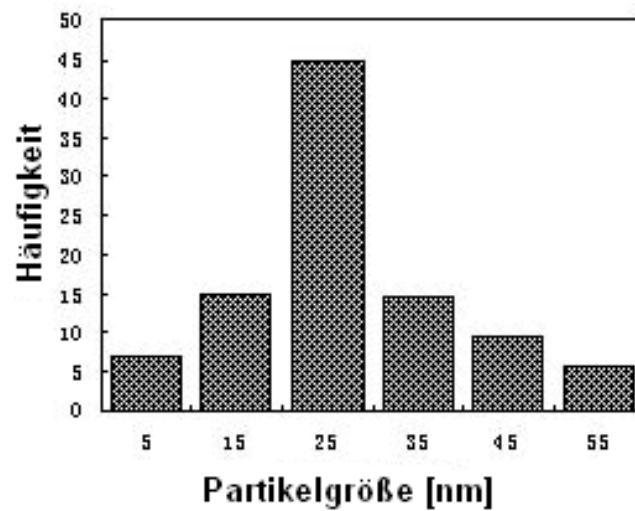
<b>Ingredient name</b>	Iron powder, partially passivated [O] ~ 10 wt.%
<b>Empirical formula</b>	Fe
<b>CAS No.</b>	7439-89-6
<b>Molecular weight</b>	55.85 amu
<b>Purity</b>	99.9 wt.% (metal basis)
<b>Average particle size</b>	25 nm (TEM) (D90=50nm)
<b>Particle size range</b>	0-60 nm (TEM)
<b>Specific Surface area</b>	40 to 60 m <sup>2</sup> /g (BET)
<b>Colour</b>	Black
<b>Morphology</b>	spherical
<b>Bulk density</b>	0.10-0.25 g/cm <sup>3</sup>
<b>True density</b>	7.87 g/cm <sup>3</sup>
<b>Melting point</b>	1535°C
<b>Production method</b>	Laser evaporation process

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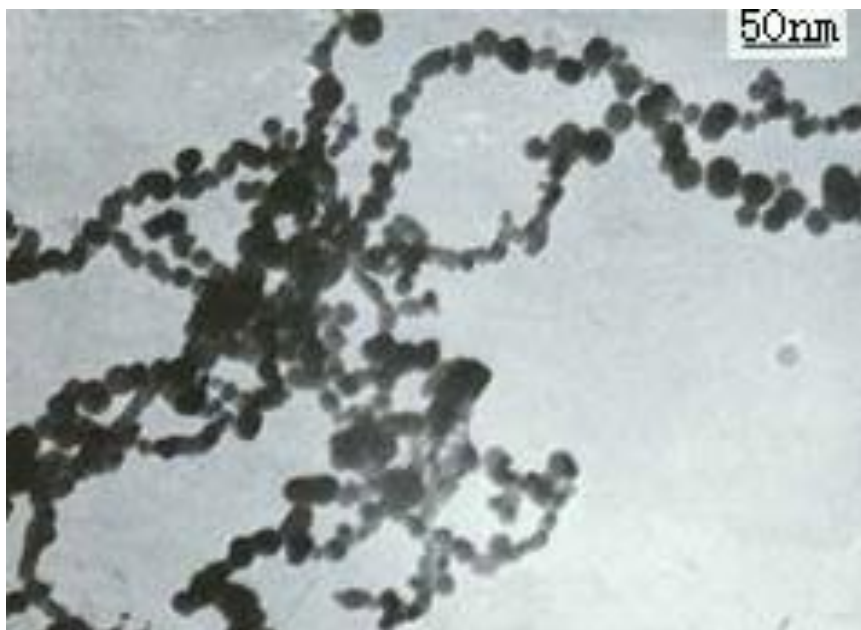
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### 3 SPECIFICATIONS



### 4 TRANSMISSION ELECTRON MICROSCOPY



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### 5 OTHER INFORMATION

#### **WARNING!**

Iron nanopowder is a combustible solid. See MSDS for specific details.

#### DISCLAIMER

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