**AMPERIT® 551**

**Chemical Formula**  
WC-CrC-Ni 73-20-7

**Chemical Name**  
Tungsten Carbide – Chromium Carbide - Nickel 73-20-7

**Description of Product**  
Agglomerated, Sintered

**Particle Sizes Available**

**Product Designation**
- AMPERIT® 551.088  53/20 µm
- AMPERIT® 551.074  45/15 µm
- AMPERIT® 551.059  30/ 5 µm

**Chemical Characteristics**

(Mass fraction in % [cg/g]; ppm [µg/g])

<table>
<thead>
<tr>
<th></th>
<th>551.088</th>
<th>551.074</th>
<th>551.059</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cr</td>
<td>17.0 - 21.0 %</td>
<td>17.0 - 21.0 %</td>
<td>16.0 - 20.0 %</td>
</tr>
<tr>
<td>Ni</td>
<td>6.5 - 8.0 %</td>
<td>6.5 - 8.0 %</td>
<td>6.0 - 8.0 %</td>
</tr>
<tr>
<td>C</td>
<td>6.3 - 7.3 %</td>
<td>6.3 - 7.3 %</td>
<td>6.3 - 7.3 %</td>
</tr>
<tr>
<td>Fe</td>
<td>max. 0.30 %</td>
<td>max. 0.30 %</td>
<td>max. 0.30 %</td>
</tr>
<tr>
<td>O</td>
<td>max. 0.20 %</td>
<td>max. 0.20 %</td>
<td>max. 0.20 %</td>
</tr>
<tr>
<td>W</td>
<td>balance</td>
<td>balance</td>
<td>balance</td>
</tr>
</tbody>
</table>

**Physical Characteristics**

**Particle Size Distribution**

<table>
<thead>
<tr>
<th></th>
<th>551.088</th>
<th>551.074</th>
<th>551.059</th>
</tr>
</thead>
<tbody>
<tr>
<td>D 90 %</td>
<td>60 - 70 µm</td>
<td>50 - 60 µm</td>
<td>25 - 33 µm</td>
</tr>
<tr>
<td>D 50 %</td>
<td>35 - 43 µm</td>
<td>29 - 37 µm</td>
<td>15 - 21 µm</td>
</tr>
<tr>
<td>D 10 %</td>
<td>21 - 25 µm</td>
<td>18 - 22 µm</td>
<td>9 - 13 µm</td>
</tr>
</tbody>
</table>

Apparent Density
- 3.7 - 4.4 g/cm³ acc. ASTM B 212
- 3.7 - 4.4 g/cm³ acc. ASTM B 212
- 3.7 - 4.4 g/cm³ acc. ASTM B 417

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1) MICROTRAC by Laser Light Diffraction per ASTM C 1070.
Packaging
Standard Packaging
5 kg in one 2.5 l PE bottle, 6 bottles (30 kg) in one cardboard box.

Storage and Handling
Storage and handling are subject to the rules and regulations in the country of use.

Hazards identification in Advertising (REGULATION (EC) No 1272/2008 Article 48)
- Carcinogenicity Category 2
- Specific target organ toxicity - repeated exposure Category 2
- Skin sensitization Category 1.

Documentation
An inspection document in accordance with EN 10204 is supplied with every shipment.

Remarks
Always mix well before using.

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2) Secondary Electron Image (SEI)