Technical Data Sheet

ACS Material Graphite Fluoride

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Revision: 090817
1. Preparation Method
High-temperature reaction of fluorine gas with graphite

2. Characterizations

<table>
<thead>
<tr>
<th>Product No.:</th>
<th>GT1FF012</th>
<th>GT1F0020</th>
<th>GT1FS012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Flake</td>
<td>Powder</td>
<td>Synthetic/Artificial graphite (Powder)</td>
</tr>
<tr>
<td>Color:</td>
<td>Grey</td>
<td>Grey/ White</td>
<td>Grey/ White</td>
</tr>
<tr>
<td>Average Size:</td>
<td>200-500 μm</td>
<td>1-10 μm</td>
<td>10-20 μm</td>
</tr>
<tr>
<td>F (wt.%):</td>
<td>56-61%</td>
<td>56-61%</td>
<td>60-65%</td>
</tr>
<tr>
<td>Electrical Resistivity:</td>
<td>~10^{11} Ω·m</td>
<td>~10^{11} Ω·m</td>
<td>~10^{11} Ω·m</td>
</tr>
<tr>
<td>F/C Ratio:</td>
<td>0.8~1.1</td>
<td>0.8~1.1</td>
<td>0.8~1.1</td>
</tr>
</tbody>
</table>

Typical SEM Image of ACS Material Graphite Fluoride (Flake)
Typical SEM Image of ACS Material Graphite Fluoride ( Flake)

Typical SEM Image of ACS Material Graphite Fluoride ( Powder)
3. Application Fields

1) High energy density cathode material in lithium batteries
2) Reduction additive for lubricants
3) Weather-resistant additive for paints
4) Oxidizing agent and combustion modifier in rocket propellants and pyrolants
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