Technical Data Sheet

ACS Material Expandable Graphite

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Revision: 072517
1. Preparation Method

Chemical Oxidation Method

2. Characterizations

<table>
<thead>
<tr>
<th>Products No.</th>
<th>Expansion Start Temperature (EST, °C)</th>
<th>pH</th>
<th>Mesh</th>
<th>Packing Density (mg/cm$^3$)</th>
<th>Expansion Volume (EV, ml/g)</th>
<th>Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG-170-400</td>
<td>170</td>
<td>7.0</td>
<td>80</td>
<td>0.5</td>
<td>400</td>
<td>Highest Expansion Volume</td>
</tr>
<tr>
<td>EG-180-250</td>
<td>180</td>
<td>7.0</td>
<td>80</td>
<td>0.5</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>EG-250-180</td>
<td>250</td>
<td>7.0</td>
<td>80</td>
<td>0.5</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>EG-300-170</td>
<td>300</td>
<td>7.0</td>
<td>80</td>
<td>0.5</td>
<td>170</td>
<td>Highest Expansion Start Temperature</td>
</tr>
</tbody>
</table>

Typical SEM Image (1) of ACS Material Expandable Graphite (EG-170-400)
Typical SEM Image (2) of ACS Material Expandable Graphite (EG-170-400)

Typical SEM Image (1) of ACS Material Expandable Graphite (EG-180-250)
Typical SEM Image (2) of ACS Material Expandable Graphite (EG-180-250)

Typical SEM Image (1) of ACS Material Expandable Graphite (EG-250-180)
Typical SEM Image (2) of ACS Material Expandable Graphite (EG-250-180)

Typical SEM Image (1) of ACS Material Expandable Graphite (EG-300-170)
Typical SEM Image (2) of ACS Material Expandable Graphite (EG-300-170)

Typical XRD Analysis of ACS Material Expandable Graphite (EG-170-400)
Typical XRD Analysis of ACS Material Expandable Graphite (EG-180-250)

Typical XRD Analysis of ACS Material Expandable Graphite (EG-250-180)
3. Application Fields

1) Fire-retardant additives
2) Lubrication
3) Conductive additives

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