Applications of various foaming agents: suitable for food packaging containers, buffer materials, thermal insulation materials, and plastic pallets.

### Characteristics
- Chemical foaming agent masterbatch for Olefin / PS resins, containing Inorganic and organic composites, or Azodicarbonamide as the main component.
- Capable of achieving weight saving, prevention of sink marks (=improvement in appearance), and improvement of buffering and thermal insulating effects.
- Applicable to extrusion and injection moldings.
- Our endothermic decomposition type foaming agent masterbatch, as a composite product consisting of inorganic and organic composites, enables to form fine foam cells evenly, and produce odorless foamed articles with excellent appearance.
- Our exothermic decomposition type foaming agent masterbatch, consisting of Azodicarbonamide generates large amount of gas per unit time, and enables to produce foamed articles at relatively low cost.
- Our product also available as a foaming nucleating agent for promoting the fine foam cell formation with gas foaming method.
- Registered and approved by Japan Hygienic Olefin And Styrene Plastics Association (JHOSPA), (except some products).

### Representative Products

<table>
<thead>
<tr>
<th>Product name</th>
<th>Type of foaming agent</th>
<th>Base resin</th>
<th>Gas generation amount* (ml/g)</th>
<th>Applicable molding</th>
<th>Characteristics/application</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSC PQ217K</td>
<td>Inorganic and organic composites</td>
<td>LDPE</td>
<td>21</td>
<td>Extrusion molding</td>
<td>For general purpose</td>
</tr>
<tr>
<td>SSC PQ410K</td>
<td>Inorganic and organic composites</td>
<td>LDPE</td>
<td>45</td>
<td>Gas foaming nucleating agent</td>
<td>Foaming nucleating agent</td>
</tr>
<tr>
<td>PO412K</td>
<td>Inorganic and organic composites</td>
<td>LDPE</td>
<td>43</td>
<td>Injection molding</td>
<td>High-foaming</td>
</tr>
<tr>
<td>SSC ME6013 N</td>
<td>Inorganic and organic composites</td>
<td>LDPE</td>
<td>41</td>
<td></td>
<td>Low residue</td>
</tr>
<tr>
<td>PO251K</td>
<td>Azodicarbonamide</td>
<td>LDPE</td>
<td>46</td>
<td></td>
<td>For general purpose</td>
</tr>
<tr>
<td>PS201K</td>
<td>Organic single compound</td>
<td>PS</td>
<td>17</td>
<td></td>
<td>For PS</td>
</tr>
</tbody>
</table>

*In-house measurement  *Above is our internal experimental data. It is not guaranteed.

### Evaluation Results

**Gas generation amount curve**

**PO412K**
Type of foaming agent: Inorganic and organic composites
Concentration of foaming agent: 40%

**PO251K**
Type of foaming agent: Azodicarbonamide
Concentration of foaming agent: 20%

*Above is our internal experimental data. It is not guaranteed.

### Application

Various foaming agents, applicable to food packaging containers, buffer materials, thermal insulation materials, plastic pallets.