Technical Data Sheet

ACS Material Mesoporous Molecular Sieve
ZSM-5 Adsorbent

Table of Contents

1 – Preparation Method
2 – Characterizations
3 – Application Fields

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1. Preparation Method
Hydrothermal Method

2. Characterizations
ZSM-5 Adsorbent: Hydrophobic Zeolite Adsorbent (Product Code: G-300) and Binder-free Hydrophobic Zeolite Adsorbent (Product Code: G-360).

<table>
<thead>
<tr>
<th>Product Code:</th>
<th>G-300</th>
<th>G-360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shape:</td>
<td>Granular</td>
<td>Granular</td>
</tr>
<tr>
<td>SiO$_2$/Al$_2$O$_3$ Molar Ratio:</td>
<td>300</td>
<td>360</td>
</tr>
<tr>
<td>Dimension (mm):</td>
<td>2.0-3.0</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>BET surface area (m$^2$/g):</td>
<td>≥220</td>
<td>≥340</td>
</tr>
<tr>
<td>Bulk Density (kg/m$^3$):</td>
<td>~0.68</td>
<td>~0.68</td>
</tr>
<tr>
<td>Compressive Strength (N/mm$^2$):</td>
<td>≥25</td>
<td>≥40</td>
</tr>
<tr>
<td>Na$_2$O (%):</td>
<td>≤0.2</td>
<td>≤0.2</td>
</tr>
<tr>
<td>Comparative Crystallinity (%):</td>
<td>≥90</td>
<td>≥90</td>
</tr>
<tr>
<td>Adsorption of Hexane (W%):</td>
<td>≥7.2</td>
<td>≥9.6</td>
</tr>
<tr>
<td>Adsorption of Water (W%):</td>
<td>≤2</td>
<td>≤2</td>
</tr>
</tbody>
</table>

3. Application Fields
1) Oil refining
2) Sorbents
3) Catalytic degradation of LDPE
4) Separating and extracting of aromatics isomers
5) Removing formaldehyde and harmful volatile organics
6) Liquid-gas separation
7) Light Alkanes Dehydrogenation Progress in Chemistry
8) Aromatization of Propane
9) Para-Selective Dealkylation and Vapor Phase Beckmann Rearrangement
10) Separation of Acetic Acid from Water
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