TYPE 3A-IG MOLECULAR SIEVE
Insulating Glass Desiccant
for Solvent-free Systems

Product Information

CHEM SOURCE Type 3A-IG Molecular Sieve Beads were specifically developed to give maximum performance in Insulating Glass Units. Their unique combination of high water adsorption and low Nitrogen and Argon adsorption makes CHEM SOURCE's 3A-IG Molecular Sieve the preferred desiccant for maximizing your Insulating Glass Unit's life, appearance and performance.

CHEM SOURCE Type 3A Molecular Sieves for Insulating Glass applications are true "Low Deflection" desiccants. This "Low Deflection" characteristic means your windows have better appearance, less distortion in reflected images and lower glass and sealant stress. This dramatically lowers the potential for sealant failure or glass breakage at low temperatures and low barometric pressure.

CHEM SOURCE 3A-IG Molecular Sieve Beads for Insulating Glass Fabrication provide the optimum properties for all Dual Seal and Hot Melt Butyl Sealed units.

- High Water Adsorption
- Low Glass Deflection
- Longer Unit Life
- Less Glass Breakage
- Low Seal Stress
- Low Glass Deflection
- Low Unit Failures
- Low Argon Adsorption
- High Insulating Value

### Water Adsorption Capacity

<table>
<thead>
<tr>
<th></th>
<th>CHEM SOURCE 3A-IG</th>
<th>Competitor G</th>
<th>Competitor P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight % Adsorbed</td>
<td>21.5</td>
<td>20.0</td>
<td>18.5</td>
</tr>
</tbody>
</table>

### Gas Desorption

<table>
<thead>
<tr>
<th></th>
<th>CHEM SOURCE 3A-IG</th>
<th>Competitor G</th>
<th>Competitor P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cubic Centimeters - Air</td>
<td>0.0004</td>
<td>0.00045</td>
<td>0.0005</td>
</tr>
</tbody>
</table>

### Glass Deflection at Center

14 x 29 x 1/2 inch test unit

<table>
<thead>
<tr>
<th></th>
<th>CHEM SOURCE 3A-IG</th>
<th>Competitor G</th>
<th>Competitor P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Deflection (inches)</td>
<td>0.00045</td>
<td>0.00045</td>
<td>0.00045</td>
</tr>
</tbody>
</table>
CHEM SOURCE 3A-IG Molecular Sieve Beads for Insulating Glass applications are processed to have low desiccant dusting characteristics. This avoids unsightly dust formation on the bottom spacer bar between the panes of glass.

CHEM SOURCE 3A Molecular Sieve Beads for Insulating Glass Applications are available in two standard particle size distributions:

- **Type 3A-IG, 1.0 to 2.0 mm Beads:** Recommended for all standard IG Unit configurations with spacer sizes greater than 1/4 inch.
- **Type 3A-IG, 0.5 to 1.0 mm Beads:** Recommended for automated Desiccant filling systems, such as Lisec Machines, and narrow profile spacers (1/4 inch and smaller).

### Product Specifications and Typical Properties

<table>
<thead>
<tr>
<th>Test</th>
<th>1.0 to 2.0 mm Beads</th>
<th>0.5 to 1.0 mm Beads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spec. Values</td>
<td>Typical Values</td>
<td>Spec. Values</td>
</tr>
<tr>
<td>Moisture Content (3 hrs @ 575 °C)</td>
<td>1.5 % max.</td>
<td>0.8%</td>
</tr>
<tr>
<td>Water Adsorption @ 50%RH and 25 °C</td>
<td>20.5% min.</td>
<td>20.8%</td>
</tr>
<tr>
<td>Density (Kg/Liter)</td>
<td>0.69 - 0.75</td>
<td>0.71</td>
</tr>
<tr>
<td>Abrasion Resistance (wt. %)</td>
<td>0.2% max.</td>
<td>0.07%</td>
</tr>
<tr>
<td>Dust Test (ppm)</td>
<td>60 max</td>
<td>35</td>
</tr>
<tr>
<td>Temperature Rise (°C) (50/50 mix by wt.)</td>
<td>54 °F min.</td>
<td>72 °F</td>
</tr>
<tr>
<td>Particle Size (Beads)</td>
<td>95% min</td>
<td>98%</td>
</tr>
<tr>
<td>0.5 to 1.0 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0 - 2.0 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Product Packaging

CHEM SOURCE Type 3A-IG Molecular Sieve Beads are available in the following standard Packages:

- 25 Kg (55.12 lbs) moisture proof bag. Each bag packed in a cardboard box, 40 bags/boxes per pallet = 1,000 Kgs
- 80 Kgs (176.1 lb) per fiber drum, 4 drums per pallet
- 500 Kgs per Super Sack, 2 Sacks per pallet

### Product Safety

Molecular Sieve Beads are crystalline alumino silicate powder formed into beads with Clay binders. Since Clay binders are naturally occurring materials, they may contain low quantities of crystalline silica. Care should be taken to avoid direct inhalation of dust particles from formed Molecular Sieve and proper safety equipment should be used at all times.

Please consult the Material Safety Data Sheet for all Health and Safety Information.

### Ordering Information

To purchase this product or to obtain price quotations or additional information, please contact:

**Ramapo-Main Office**

4760 Goer Drive, Unit F  
N. Charleston, SC 29406  
Phone: 800-866-9173  
Fax: 888-858-5077  
Web: [www.ramaposales.com](http://www.ramaposales.com)  
E-Mail: info@ramaposales.com

**Ramapo-NE Distribution Hub**

10 Clifton Blvd  
Clifton, NJ 07011  
Phone: 800-866-9173  
Fax: 888-858-5077

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Rev. #: 9  
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