**Product Description**

SCG HDPE H810BGY is a grey color compound, high density polyethylene resin that is specially designed for large water tanks. It provides excellent mechanical properties and process ability. Well dispersed stabilizer and anti-oxidant provide high thermal stability. Fully UV stabilizers package design for outdoor application.

**Typical Application**

- Water Tank

**Product Characteristics**

- Good process ability
- High Thermal stability
- Outstanding mechanical strength
- Good UV protection

**Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Typical Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melt Flow Rate</td>
<td>ASTM D 1238 @ 190 °C, 5.0 kg</td>
<td>0.25</td>
<td>g/10 min</td>
</tr>
<tr>
<td>Melt Flow Rate</td>
<td>ASTM D 1238 @ 190 °C, 21.6 kg</td>
<td>10.35</td>
<td>g/10 min</td>
</tr>
<tr>
<td>Density</td>
<td>ASTM D 1505</td>
<td>0.955</td>
<td>g/cm³</td>
</tr>
<tr>
<td>Tensile Strength at Yield</td>
<td>ASTM D 638*</td>
<td>24</td>
<td>MPa</td>
</tr>
<tr>
<td>Tensile Strength at Break</td>
<td>ASTM D 638 *</td>
<td>&gt; 35</td>
<td>MPa</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>ASTM D 638*</td>
<td>&gt; 750</td>
<td>%</td>
</tr>
<tr>
<td>Flexural Modulus</td>
<td>ASTM D 790</td>
<td>&gt; 850</td>
<td>MPa</td>
</tr>
<tr>
<td>Notched Izod Impact</td>
<td>ASTM D 256 @ 23 oC</td>
<td>290</td>
<td>J/m</td>
</tr>
<tr>
<td>Oxidative induction time</td>
<td>ISO 11357-6 @ 210 °C</td>
<td>&gt; 30</td>
<td>min</td>
</tr>
<tr>
<td>Hardness</td>
<td>ASTM D 2240</td>
<td>62</td>
<td>Shore D</td>
</tr>
<tr>
<td>ESCR</td>
<td>ASTM D 1693 @ 10% Igepal B</td>
<td>&gt;5000</td>
<td>Hrs, F0</td>
</tr>
<tr>
<td>Vicat Softening Temperature</td>
<td>ASTM D 1525</td>
<td>122.6</td>
<td>°C</td>
</tr>
</tbody>
</table>

* Crosshead speed is 100 mm/min

**Note:** the given values are typical value measured on the product. Values herein are not to be constructed as a product Specification.
Processing

For extrusion of SCG HDPE H810BGY, it is recommended to use a screw giving good melting and mixing without excessive shear. A single or double flight PE screws have proven satisfactory and will be used with good result. For normal extrusion equipment, we suggest a melt temperature of 190 – 220 °C.

Product Technical Assistance

For technical assistance or further information on this product or any other SCG Chemicals' products contact your SCG Chemicals technical service at the address or telephone number as specified below.

Product Available Form

- Color Pellet

Product Packaging

- 25 kg loose bag
- 25 kg stretch wrap palletized
- 750 kg big bag
- Seabulk container

Storage

- Store in original container in tidy according to the manual of Handling and Storage from Thai Polyethylene Company Limited/Thai Polypropylene Company Limited.
- Product(s) should be stored in dry and dust free location at temperature below 50 °C and protected from direct sunlight and/or heat, well-ventilated area, away from incompatibility materials and food and drink, as this may lead to quality deterioration, which results in odor generation and color changes and can have negative effects on the physical properties of this product.
- Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
- The storage area should be stable and not be slopped.

Safety

- The product is not classified as a hazardous material.
- Please see our Material Safety Data Sheet for details on various aspects of safety, recovery, and disposal of the products; for more information, contact your SCG Plastics/SCG Performance Chemicals technical service.
Recycling

- The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.
- Please see our Material Safety Datasheet for details on various aspects of safety, recovery and disposal of the products; for more information, contact your SCG Plastics/SCG Performance Chemicals technical service.

Related

- The latest version of this document will be available at our website, www.scgchemicals.com, or can be obtained from the SCG Plastics/SCG Performance Chemicals technical service.
- The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.
  - Material Safety Datasheet
  - Statement on compliance to food contact regulations

Disclaimer

- The Applications specified herein is for reference only.
- It is customer’s responsibilities to inspect and test the product for suitability of the customer’s own use and purpose. The customer is responsible for appropriate, safe, legal use, processing and handling of the product.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. We however do not assume any liability whatsoever for the accuracy and completeness of the information contained herein.
- We make no warranties which extend beyond the description herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
- No liability can be accepted in respect of the use of the product in conjunction with other materials. The information contained herein relates exclusively to the product when it is not used in conjunction with any third party’s materials.