Polyethylene
BRALEN RB 03-23
LDPE for general purposes

Description
BRALEN RB 03-23 is a general purpose grade of low density polyethylene. It is characterized by high environmental stress cracking resistance and very good mechanical properties. This grade is additives free.

Applications
BRALEN RB 03-23 is designed for production of heavy duty and shrink films of thickness 0.07 – 0.25 mm. It is well suited for blow moulding of various containers, pipes, sheets and profiles extrusion and also for injection moulding. It is suitable for toys production.

BRALEN RB 03-23 is suitable for food contact. The product complies with Food Contact Regulations. The grade is suitable for manufacturing of pharmaceutical packing-product.

Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Test method</th>
<th>Unit</th>
<th>Typical value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFR (190 °C/2.16 kg)</td>
<td>ISO 1133</td>
<td>g/10 min</td>
<td>0.35</td>
</tr>
<tr>
<td>Density (23°C) *</td>
<td>ISO 1183</td>
<td>kg/m³</td>
<td>919</td>
</tr>
<tr>
<td>Tensile strength (MD/TD) **</td>
<td>ISO 527-1,3</td>
<td>MPa</td>
<td>23/21</td>
</tr>
<tr>
<td>Tensile strain at break (MD/TD) **</td>
<td>ISO 527-1,3</td>
<td>%</td>
<td>400/500</td>
</tr>
<tr>
<td>Dart drop **</td>
<td>ISO 7765-1</td>
<td>g</td>
<td>300</td>
</tr>
<tr>
<td>Haze **</td>
<td>ISO 14 782</td>
<td>%</td>
<td>18</td>
</tr>
<tr>
<td>Vicat softening temperature *</td>
<td>ISO 306</td>
<td>°C</td>
<td>97</td>
</tr>
<tr>
<td>Shore D hardness *</td>
<td>ISO 868</td>
<td></td>
<td>47</td>
</tr>
</tbody>
</table>

* Typical properties, not to be used as specification. Average mechanical property values of several measurements carried out on standard injection-moulded test specimens prepared in accordance with ISO 1872-2.
** Properties on film in M.D./T.D. - thickness of 0.07 mm (MFR=0.35g/10min) and 0.04 mm (MFR more then 0.35g/10min), blow up ratio 2,5:1
Processing

**BRALEN RB 03-23** can be used in conventional extrusion machines. Recommended processing temperatures are 170-210 °C.

Storage and Handling

Pellets are packed in 25 kg PE-LD bags and transported on shrink-wrapped pallets at eligible load of polymer 1250 or 1375 kg. Heat treated pallets are available as well. Transportation in a road silo or rail silo is also available. For more detailed information please contact Slovnaft Petrochemicals and TVK sales representative. Since polyethylene is a combustible substance, the fire safety rules applicable for combustible materials in warehouses and store rooms should be observed.

If polymer is stored in conditions of high humidity and fluctuating temperatures, then atmospheric moisture can condense inside the packing. If it happened, it is recommended the pellets to be dried before use. During the storage polyethylene should not be exposed to UV radiation and temperatures above 40°C. Producer does not take responsibility for any damages caused by adverse storage.

REACH Statement

Polymers are exempt of REACH registration. However, their raw materials which mean monomers and most additives have been registered. Slovnaft Petrochemicals, s.r.o./TVK Plc. is committed to fully respect this new legislation and will only use REACH compliant raw materials. At this point in time LDPE BRALEN/TIPOLEN does not contain any substances specifically identified as SVHC at levels greater than 0.1%.

Safety

See MSDS.

Recycling

Polyethylene resins are suitable for recycling using modern recycling methods. In-house production waste should be kept clean to facilitate direct recycling.

Disclaimer

The information provided in this publication has been compiled to the best of our present knowledge. However, in view of the various applications of polyethylene resins and the equipment used, the processing conditions may differ. The recommendations and data herein are to be construed as informational only and do not relieve users from carrying out their own tests and experiments prior to processing in order to check suitability for a specific use. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed. Our products are under continuous development, therefore we reserve the right to change the information presented in this brochure at our own discretion. The REACH statement herein does not constitute legal advice. The REACH statement is provided for informational purpose only.
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