LOXIOL® VPG 861
Lubricant / Release Agent

Description
LOXIOL® VPG 861 is a long-chain ester of pentaerythritol.

General Appearance
Solid, odorless
Available as powder

Specified Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Test Method*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dropping point (°C)</td>
<td>62 - 70</td>
<td>DIN ISO 2176</td>
</tr>
<tr>
<td>Acid value (mg KOH/g)</td>
<td>0 - 2</td>
<td>DIN EN ISO 2114</td>
</tr>
<tr>
<td>Hydroxyl value (mg KOH/g)</td>
<td>0 - 12</td>
<td>DIN 53240</td>
</tr>
<tr>
<td>Saponification value (mg KOH/g)</td>
<td>191 - 200</td>
<td>DIN EN ISO 3681</td>
</tr>
<tr>
<td>Iodine value (g I / 100 g)</td>
<td>0 - 2</td>
<td>DIN 53241 T1-95</td>
</tr>
<tr>
<td>Color Gardner</td>
<td>0 - 3</td>
<td>DIN ISO 4630</td>
</tr>
</tbody>
</table>

* Test method: DIN (Europe) | AOCS (Asia)

Properties and Applications
This thermo-resistant ester with its minimum volatility is suitable as a processing agent for various types of thermoplastics.

In the injection molding of polycarbonate, PET, PBT, PMMA and polyacetal, LOXIOL® VPG 861 prevents the polymer melt from sticking to the hot machine parts and facilitates mold release at higher temperatures. That makes it possible to use molds with a complex geometry. In addition, it improves the feed behavior and prevents the granules from melting in the feed zone (bridge formation).

LOXIOL® VPG 861 also has a favorable influence on the tool filling speed, which improves the surface properties of the finished articles. Polycarbonate and PMMA containing an amount between 0.1 to 0.5 percent of LOXIOL® VPG 861 remain transparent and color stable.

LOXIOL® VPG 861 may be used as antiblock additive for biaxially oriented polyester films improving further resistance to abrasion.

Depending on its use as an internal or external lubricant, LOXIOL® VPG 861 is commonly added in dosages of about 0.2 to 1.0 percent.
**Recommended Dosage**

0.1 - 0.5 % for PC and PMMA  
0.2 - 1.0 % for other resins

**Density**

<table>
<thead>
<tr>
<th>Product Form</th>
<th>Temperature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Density</td>
<td>20 °C</td>
<td>0.957 g/cm³</td>
</tr>
<tr>
<td>Powder-Bulk Density</td>
<td>20 °C</td>
<td>0.54 g/cm³</td>
</tr>
</tbody>
</table>

**Certifications**

LOXIOL® VPG 861 is registered in compliance with the EU REACH regulation. LOXIOL® VPG 861 complies with indirect food contact directives. Further information is available upon request.

**Health and Safety Information**

Please review our Safety Data Sheet for best practices when using this material.

**Packaging Sizes**

- Bags, 25 kg
- Big bags, 900 kg

**Storage and Handling**

It is recommended to store LOXIOL® VPG 861 at room temperature and to protect the product against the effects of heat and frost. If stored in sealed original packaging, LOXIOL® VPG 861 is durable for at least 24 months from the date of manufacture.

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