



LOXIOI[®] P 861/3.5

Lubricant / Release Agent

Description

LOXIOI[®] P 861/3.5 is a long-chain fatty acid ester of pentaerythritol.

General Appearance

Solid, odorless

Available as powder or beads

Specified Data

Parameter	Value	Test Method*
Dropping point (°C)	60 - 65	DIN ISO 2176 AOCS Cc 18-80
Acid value (mg KOH/g)	0 - 1.5	DIN EN ISO 2114 AOCS Te 1a-64
Hydroxyl value (mg KOH/g)	20 - 37	DIN 53240 AOCS Cd 13-60
Saponification value (mg KOH/g)	187 - 201	DIN EN ISO 3681 AOCS TI 1a-64
Color Lovibond 1" yellow	0 - 2.5	DGF C-IV 4b AOCS Cc 13e-92
Color Lovibond 1" red	0 - 1.5	DGF C-IV 4b AOCS Cc 13e-92

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

Properties and Applications

This thermostable 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, LOXIOI[®] P 861/3.5 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 behaviour and prevents the granules from melting in the feed zone (bridge formation).

LOXIOI[®] P 861/3.5 also has a favorable influence on the tool filling speed, which improves the surface properties of the finished articles. Polycarbonate and PMMA containing 0.1 to 0.5 % LOXIOI[®] P 861/3.5 remain transparent and color stable.

LOXIOI[®] P 861/3.5 may be used as antiblock additive for biaxially oriented polyester films improving further resistance abrasion.

Depending on its use as internal and external lubricant, LOXIOI[®] P 861/3.5 is commonly added at dosages of about 0.2 to 1.0 %.



Recommended Dosage

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

Density

Product Form	Temperature	Value
Solid Density	20 °C	0.957 g/cm³
Powder-Bulk Density	20 °C	0.54 g/cm³
Beads-Bulk Density	20 °C	0.53 g/cm³

Certifications

LOXIOL® P 861/3.5 is registered in compliance with the EU REACH regulation. LOXIOL® P 861/3.5 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

LOXIOL® P 861/3.5 can be purchased as liquid material in heated tank-trucks upon request.

Storage and Handling

It is recommended to store LOXIOL® P 861/3.5 at room temperature and to protect the product against the effects of heat and frost. If stored in sealed original packaging, LOXIOL® P 861/3.5 should be stable for at least 24 months from the date of manufacture.

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