

# INEOS

## Olefins & Polymers Europe

Your partner in

**PP FILM**

Faster,  
thinner,  
better  
with ELTEX<sup>®</sup> P



[www.ineos.com](http://www.ineos.com)

## Our cast and blown polyolefins resins range

We also provide a flexible packaging market with a broad and specialized portfolio of LDPE, LLDPE and metallocene LLDPE (under the brand name ELTEX® PF) resins for all types of processing equipment and applications.

Finally, INEOS Olefins & Polymers Europe also offers selected polypropylene grades (homopolymer and random copolymer) in powder form in melt flow indexes ranging from 2 to 45g/10min under the brand name ELTEX® P.




## Solutions to customers

**INEOS Olefins &**

**Polymers Europe**

is committed to having close and continuous collaboration with customers, converters, machine producers and brand owners. Thanks to our proven technical and marketing expertise, INEOS Olefins & Polymers Europe offers both solutions as well as products to our market.

INEOS Olefins & Polymers Europe has a dedicated team of technical experts based in a world-class laboratory located in Brussels (Belgium) and is actively engaged in new development projects. The team provides a highly experienced and knowledgeable resource for customers to test and develop new film structures in partnership with INEOS Olefins & Polymers Europe.

The background of the entire page is a close-up photograph of a large roll of blue polypropylene (PP) film. The film is being processed on a metal roller, which is visible in the lower-left corner. The film is unspooling from the roller, creating a series of concentric, overlapping loops that fill most of the frame. The lighting is bright, highlighting the texture and sheen of the plastic material. The overall color palette is dominated by various shades of blue, from light sky blue to deep navy blue.

PP has become the polymer of choice for the packaging industry. Whatever the processing technique used for the production of films, the main attributes of PP resins such as

Stiffness

Transparency

Barrier properties

Sealability

Density

lead to exceptional film properties for numerous and wide ranging applications including food and industrial packaging, adhesive tapes, laminated or metallised films for all types of usage.

## PP Film

**We are the world-leading supplier of heat seal resins for the production of bi-axially oriented (BOPP) films.**

With a presence of more than 30 years in the BOPP film market, INEOS Olefins & Polymers Europe has always interacted with the different players of the supply chain from the BOPP producers, the converters and machine producers, the packers/fillers through to the end-users.

Thanks to the diversity of its inherited polypropylene technologies (bulk, gas phase such as Innovene® and Unipol®), INEOS Olefins & Polymers Europe markets a broad and complementary portfolio of polypropylene resins designed to meet the demand placed upon BOPP films.

- Standard homopolymer intended for BOPP tenter and double bubble processes
- Homopolymer suitable for metallisation intended for BOPP tenter and double bubble process
- Modified homopolymer intended for BOPP tenter process

### Homopolymer for BOPP films

Product name	MFR g/10 min ISO 1133	MP °C ASTM D3417	Flexural Modulus MPa ISO 178	Additives		
				Slip	AB	Ca St.
100-GD02	2.0	162	1450	○	○	○
101-GF02	2.0	159	1400	○	○	○
100-GD03	3.0	162	1450	○	○	○
101-GB08	8.0	161	1450	○	○	●
102-GD08	8.0	161	1450	○	○	○

■ for metallisation

As the world-leading supplier of ELTEX® P heat seal resins, INEOS Olefins & Polymers Europe offers the most complete range of skin layer resins. We have five distinct resin types:

- High ethylene content random propylene copolymer (ELTEX® P KS400 series) with SIT 115 °C
- Propylene/ethylene/butene terpolymer (ELTEX® P KS300 and KV300 series) with SIT 105 °C
- High comonomer content propylene/ $\alpha$ -olefin copolymer (ELTEX® P KS341, KS399) with SIT 90 °C
- Very high comonomer content propylene/ $\alpha$ -olefin copolymer (ELTEX® P KS689) with SIT 80 °C
- Propylene/ $\alpha$ -olefin copolymer for metallised film with high barrier performance (ELTEX® P KS607)



## ELTEX® P skin layer resins product slate

Product name	MFR	SIT	MP	Additives		
	g/10 min ISO 1133	°C INEOS (1)	°C ASTM D3417	Slip	AB	Ca <sub>2</sub>
■ ELTEX® P KS400	5.0	115	134	●	●	●
	5.0	115	134	○	○	○
	5.0	115	134	○	○	●
	7.3	115	134	●	●	●
	7.0	115	134	○	○	●
■ ELTEX® P KS300	5.0	105	126	●	●	●
	5.0	105	126	○	○	●
	9.0	109	128	○	●	○
	9.0	90	125	○	○	●
	5.0	105	131	●	●	●
	5.0	105	131	○	○	○
	5.0	105	131	○	○	●
	5.0	105	131	○	●	●
	7.3	105	131	●	●	●
	■ ELTEX® P KS341	7.3	92	115	○	●
5.0		90	131	○	○	●
■ ELTEX® P KS689	5.0	80	130	○	○	●
■ ELTEX® P KS607	5.0	121	145	○	○	○

**SIT** Seal initiation temperature, **MP** Melting temperature

■ for metallisation

(1) Measurements carried out on coextruded BOPP films (20 µm) (untreated faces)

Two heated flat teflonized jaws, dwell time = 1 sec, pressure = 3 bar

The tables give typical values measured on the products. These values should not be considered as specifications.

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## PP resins for blown and cast film applications

Product name	MFR <i>g/10 min</i> <i>ISO 1133</i>	Flexural Modulus  <i>MPa</i> <i>ISO 178</i>	Product type	Additives			
				Slip	AB	AS	Nucleated
100-GA02	2.0	1450	HPP	○	○	○	○
150-GA02	2.0	1450	HPP	○	○	○	○
100-GA03	3.0	1450	HPP	○	○	○	○
150-GA03	3.0	1450	HPP	○	○	○	○
101-GB08	8.0	1450	HPP	○	○	○	○
102-GD08	8.0	1450	HPP	○	○	○	○
100-GA09	9.0	1500	HPP	○	○	○	○
101-SA09	9.0	1450	HPP	●	○	○	○
100-GA12	12.0	1400	HPP	○	○	○	○
200-GA02	2.0	950	RCP	○	○	○	○
200-NA02	2.0	1000	RCP	○	○	○	●
200-CA02	1.7	950	RCP	○	○	●	●
ELTEX® P KF309	1.0	600	TERP - SIT 105°C	○	○	○	○
ELTEX® P KS357	5.0	620	TERP - medical	○	○	○	○
ELTEX® P KS351	7.3	620	TERP - SIT 105 °C	●	●	○	○
ELTEX® P KV309	8.0	600	TERP - SIT 108 °C	○	○	○	○
ELTEX® P KV349	9.0	525	TERP - SIT 90 °C	○	○	○	○
ELTEX® P RF110	0.8	1300	ICP/retortable	○	○	○	○
400-GA03	2.5	1250	ICP	○	○	○	○
400-GA05	5.0	1200	ICP	○	○	○	○
401-NA06	6.0	1200	ICP	○	○	○	●

HPP Homopolymer

TERP Terpolymer

RCP Random Copolymer

ICP Impact Copolymer

■ for metallisation

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INEOS is one of the world's largest chemical companies. Founded in 1998, the company employs 15,000 people and has turnover of around 47 billion US Dollars.

INEOS Olefins & Polymers Europe is a leading producer of olefins and polyolefins.

[www.ineos.com](http://www.ineos.com)

**INEOS Olefins & Polymers Europe** offers a full range of high value polyolefins solutions for selected market applications such as pressure pipes & fittings, sewage and drainage pipes and fittings, caps and closures, packaging, heat-seal and automotive, through dedicated sales and technical service teams focused on each market segment.

Building on our leading technology, strong product development capability and willingness to create value and strong relationships with customers and end-users, INEOS Olefins & Polymers Europe is committed to serve the current and future needs of the world polypropylene film market where we offer all our products for:

- Bi-axially oriented (BOPP) film applications with a special focus on our market heat seal resins marketed under the prestigious brand name ELTEX® P
- Cast polypropylene (CPP) film applications
- Blown polypropylene film applications

Please contact our technical team for advice via your local representative. For Technical Data Sheets, Safety Data Sheets and Declaration of Compliance, visit us at [www.ineos.com](http://www.ineos.com). For any further information please contact us at [IneosPofCSC@ineos.com](mailto:IneosPofCSC@ineos.com)