INEOS Olefins & Polymers Europe

Recycl-IN rLL9110

Recycl-IN

DATA SHEET

Product Technical Information

Recycl-IN rLL9110 is a natural hybrid polyethylene containing 60% of post-consumer recyclate.

Benefits & Features

Recycl-IN rLL9110 is a ready-to-use hybrid polyethylene compound containing 60% of postconsumer recyclate (PCR)-and supplied in a pellet form. The product is made from selected PCR materials and virgin resins. **Recycl-IN rLL9110** contains a minimum of 85% of linear low density polyethylene.

Recycl-IN rLL9110 is characterised by an outstanding toughness and it offers the following properties when extruded in a film:

/ Excellent impact strength and puncture resistance
/ Good gloss and transparency
/ Low sealing initiation temperature and good hot tack strength
/ Superior bubble stability and extrudability
/ Excellent blending compatibility with other LLDPE and LDPE grades

Applications

Recycl-IN rLL9110 has been developed for use in non-food applications such as doypacks, liners, FFS bags, secondary packaging films.

Recycl-IN rLL9110 can be used pure or as a blending partner with other polyolefins. In addition, **Recycl-IN rLL9110** offers easy extrudability.

We recommend that you consult your INEOS technical representative for further advice on the use of **Recycl-IN rLL9110**.

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Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	230°C/2.16Kg	ISO 1133-1	1.65	g/10min
Physical				
Density ISO 1872-1	23°C	ISO 1183-2	914	kg/m3
Mechanical				
Dart drop impact Method A		ASTM D 1709	1500	g
Tensile strength at Yield MD/T		ISO 527-3	8 / 8	MPa
Tensile strength at break MD/TD		ISO 527-3	41 / 37	MPa
Tensile strain at break MD/TD		ISO 527-3	520 / 620	%
1% Secant modulus MD/TD		ISO 527-3	130 / 150	MPa
Elmendorf tear strength MD/TD		ASTM D 1922	210/ 450	g/25µm
Optical				
Haze	25µm	ASTM D 1003	7	%
Gloss	45°C	ASTM D 2457	67	‰

Data should not be used for specification work

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Processing Guidelines

Recycl-IN rLL9110 in lean blends can be processed on most standard extrusion equipment. Optimisation of conditions may be necessary, depending on the exact blend used.

Recycl-IN rLL9110 rich film formulations are often processed on modified LDPE machinery, but for the best performance the use of purposely designed LLDPE machinery is recommended. Particular attention should be paid to maintaining a low melt temperature, and an efficient bubble cooling system should be employed. The recommended melt temperature range is 190 - 230°C.

Storage

The product should be stored in a dry and dust free environment at temperature below 50°C. Exposure to direct sunlight should be avoided as this may lead to product deterioration. It is advised to process the product within maximum one year after delivery.

Disclaimer

Although **Recycl-IN™** compounds offer Polyethylene virgin-like characteristics, they contain high levels of mechanically recycled post-consumer waste and, therefore, are not free from any gel, black spot, or other impurities. INEOS O&P Europe is taking all possible measures to avoid or minimise the presence of these defects but cannot guarantee their total absence.

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Unless specifically indicated, the product mentioned herein is not suitable for applications in the medical or pharmaceutical

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