

Recycl-IN rLL9210

Recycl-IN

Product Technical Information

Recycl-IN rLL9210 is a natural hybrid polyethylene containing 60% of post-consumer recyclate

Benefits & Features

Recycl-IN rLL9210 is a ready-to-use hybrid polyethylene containing 60% of post-consumer recyclate (PCR) and supplied in a pellet form. The PCR is made from selected PCR materials and virgin resins. Recycl-IN rLL9210 contains a minimum of 85% of linear low density polyethylene.

Recycl-IN rLL9210 is characterized by a mechanical strength similar to those of virgin materials, and it offers the following properties when extruded in

- / Good stiffness/toughness balance
- / Good gloss and transparency
- / Superior bubble stability and extrudability
- / Excellent blending compatibility with other LLDPE grades

Applications

Recycl-IN rLL9210 has been developed for use in non-food packaging applications such as doypacks, liners, FFS bags, secondary packaging films, and stretch films.

Recycl-IN rLL9210 can be used pure or as a blending partner with other polyolefins. In addition, Recycl-IN rLL9210 offers easy extrudability.

We recommend that you consult your INEOS technical representative for further advice on the use of Recycl-IN rLL9210.

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Properties	Conditions	Test Methods	Values	
Rheological				
Melt Flow Rate	190°C/2.16Kg	ISO 1133-1	1.3	
Physical				
Density ISO 1872-1	23°C	ISO 1183	920	kg/m ³
Mechanical(*)				
Dart drop impact Method A		ASTM D256	140	g
Tensile strength at Yield MD/TD			10 / 10	MPa
Tensile strength at break MD/TD			30 / 25	MPa
Tensile strain at break MD/TD			510 / 650	%
1% Secant modulus MD/TD			180 / 210	MPa
Elmendorf tear strength MD/TD		ASTM D190	200 / 560	g/25µm
Optical(*)				
Haze	25µm	ASTM D1535	10	%
Gloss	45°C	ASTM D2464	60	%

Data should not be used for specification work

(*) 25 µm blown film, 2.5:1 blow-up ratio, 210°C melt temperature - MD = machine direction, TD = transverse direction

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Processing Guidelines

Recycl-IN rLL9210 in lean blends can be processed on most standard LLDPE production equipment. Optimisation of conditions may be necessary, depending on the equipment used.

Recycl-IN rLL9210 rich film formulations are often processed on standard LLDPE machinery, 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 cooling system should be employed. The recommended melt temperature range is 190 - 210°C.

Storage

The product should be stored in a dry and dust free environment at a temperature below 5°C. Exposure to direct sunlight should be avoided as this may cause product deterioration. It is advised to process the product within maximum one year after production.