INEOS Olefins & Polymers Europe

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 compound containing 60% of post-consumer recyclate (PCR)-and supplied in a pellet form. The product 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 a film:

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

Applications

Recycl-IN rLL9210 has been developed for use in non-food flexible 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 useof Recycl-IN rLL9210.

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Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	190°C/2.16Kg	ISO 1133-1	1.3	g/10min
Physical				
Density ISO 1872-1	23°C	ISO 1183-2	920	kg/m^3
Mechanical(*)				
Dart drop impact Method A		ASTM D 1709	140	g
Tensile strength at Yield MD/TD		ISO 527-3	10 / 10	MPa
Tensile strength at break MD/TD		ISO 527-3	30 / 25	MPa
Tensile strain at break MD/TD		ISO 527-3	510 / 650	%
1% Secant modulus MD/TD		ISO 527-3	180 / 210	MPa
Elmendorf tear strength MD/TD		ASTM D 1922	200/ 560	g/25µm
Optical(*)				
Haze	25µm	ASTM D 1003	10	%
Gloss	45°C	ASTM D 2457	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 extrusion equipment. Optimisation of conditions may be necessary, depending on the exact blend used.

Recycl-IN rLL9210 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.

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