INEOS Olefins & Polymers Europe

Recycl-IN rLL9210

Recycl-IN

DATA SHEET

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 postconsumer 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 grade

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 use of **Recycl-IN rLL9210**.

© INEOS Olefins & Polymers Europe, January 2026

INEOS

INEOS Olefins & Polymers Europe

Recycl-IN rLL9210

Recycl-IN

Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	230°C/2.16Kg	ISO 1133-1	1.3	g/10min
Physical				
Density ISO 1872-1	23°C	ISO 1183-2	920	kg/m3
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

© INEOS Olefins & Polymers Europe, January 2026

INEOS

INEOS Olefins & Polymers Europe

Recycl-IN rLL9210

Recycl-IN

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.

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.

REGULATORY INFORMATION
The product and uses described herein may be subject to specific requirements or limitations for use in certain applications like food contact, drinking water or medical devices. Further information may be obtained from the website www.ineos.com where a specific Regulatory Certificate is available for each grade under the heading “SDS & Regulatory Certificate”.

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

sectors. HEALTH AND SAFETY INFORMATION
The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Safety Data Sheet (SDS) that may be obtained from the website www.ineos.com. Before using any material, a customer is advised to consult the SDS for the product under consideration for use.

EXCLUSION OF LIABILITY
Although INEOS O&P Europe endeavours to ensure that all information and advice relating to our materials or other materials howsoever provided to you by INEOS O&P Europe is accurate and up to date, no representation or warranty, express or implied is made by INEOS O&P Europe as to its accuracy or completeness. All such information and advice is provided in good faith and INEOS O&P Europe is not, to the maximum extent permitted by law, liable for any action you may take as a result of relying on such information or advice or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

In addition data and numerical results howsoever provided to you by INEOS O&P Europe are given in good faith and are general in nature. Data and numerical results are not and shall not be regarded as specifications and as such INEOS O&P Europe is not, to the maximum extent permitted by law, liable for any action that you take as a result of relying on such data and results or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

It remains at all times your responsibility to ensure that INEOS O&P Europe materials are suitable for the particular purpose intended and INEOS O&P Europe shall not be responsible for any loss or damage caused by misuse of INEOS O&P Europe products. To the maximum extent permitted by law, INEOS O&P Europe accepts no liability whatsoever arising out of the application, adaptation or processing of the products described herein, the use of other materials in lieu of INEOS O&P Europe materials or the use of INEOS O&P Europe materials in conjunction with such other materials.

© INEOS Olefins & Polymers Europe, January 2026

INEOS