

M21N430

Product Technical Information

Ethylene-MethAcrylic-Acid-Copolymer (EMAA) for extrusion coating.

Benefits & Features

M21N430 is an additive free ethylene-methacrylic-acid-copolymer (EMAA) with a low MAA content.

Its special polymer structure gives the following properties:

- Improved adhesion properties to standard LDPE/mLLDPE or other polar substrates, especially with aluminium foil and metallised film at high line speeds or low coating weights
- Good processability in mono- and coextrusion with comparable neck-in and draw down to LDPE
- Exhibits good sealing properties enhanced by the presence of the comonomer
- Good organoleptical properties
- Low fumes during processing, high purity and a low gel level

Applications

M21N430 is a speciality extrusion coating resin with improved adhesion characteristics. Main application fields include aluminium foil and metallized film coating both for industrial use, food and flexible packaging.

We recommend that you consult your INEOS technical representative for further advice on the use of **M21N430**.

Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	190°C/2.16Kg	ISO 1133-1	7.5	g/10 min
Co-monomer				
Methacrylic Acid Content		INEOS Test Method	1.2	%
Mechanical*				
Shore hardness D		ISO 868	47	-
Izod Impact Strength		ISO 180	45.6	kJ/m ²
Flexural Modulus		ISO 178	209	MPa
Tensile Modulus		ISO 527-2	238	MPa
Tensile strength at Yield		ISO 527-2	9.9	MPa
Tensile strength at Break		ISO 527-2	10.5	MPa
Tensile strain at Break		ISO 527-2	394	%
Thermal				
Vicat Softening Temperature	10N	ISO306/A50	88	°C
DSC Melting Temperature	10°C/min	ISO 11357-3	108	°C
Data should not be used for specification work				

* Measurements made on compression moulded plaques



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Processing guidelines

M21N430 can be processed on commercial extrusion coating equipment over the melt temperature range from 260 to 325°C. Low coating weights can be obtained at extrusion rates normally used for common substrates. Identical extrusion and processing parameters should be used as for conventional LDPE of identical MFR. When extruding **M21N430**, precautions should be taken to prevent equipment corrosion. The resin should not be left standing in the extruder for extended periods. After extrusion of **M21N430**, the extruder should be purged with LDPE.

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.

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.

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