



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 | 48 | - |
| Tensile strength at Yield | | ISO 527-2 | 9 | MPa |
| Tensile strength at Break | | ISO 527-2 | 10.5 | MPa |
| Tensile strain at Break | | ISO 527-2 | 500 | % |
| Thermal | | | | |
| Vicat Softening Temperature | 10N | ISO306/A50 | 90 | °C |
| DSC Melting Temperature | 10°C/min | INEOS Test Method | 108 | °C |
| Data should not be used for specification work | | | | |

* Measurements made on compression moulded plaques

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.



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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.