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.

August, 2015
Published by

INEOS Olefins & Polymers Europe

M21N430

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.

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.

August, 2015

Published by

INEOS Olefins & Polymers Europe