

21H460

Product Technical Information

LDPE for Blown film

Applications

- 21H460 is suitable for a variety of general-purpose packaging films, liners, carrier bags and fine shrink film.

Characteristics

21H460 is an autoclave LDPE homopolymer. It offers the following properties:

- Good strength and dart drop resistance
- High clarity
- Good drawdown
- Low tendency to block

If corona treatment is necessary, the level should normally be in the range 38-48 mN/m. We recommend that you consult your INEOS Polyolefins technical representative for further advice on the use of 21H460.

Properties	Test Methods	Values	Units	
Physical				
Melt Flow Rate	ISO 1133 Condition 4	1.5	g/10min	
Conventional density (conditioning ISO 1872/1)	ISO 1183 Method D	922	kg/m ³	
Vicat Softening temperature	ISO 306 Method A	95	°C	
Other additive: antioxidant				
Film*				
Dart drop impact	Method A	ASTM D1709	120	g
Tensile stress @ yield	MD/TD	ISO 1184	10/10	MPa
Tensile stress @ break	MD/TD	ISO 1184	22/21	MPa
Elongation @ break	MD/TD	ISO 1184	400/600	%
1% Secant Modulus	MD/TD	ISO 1184	140/150	MPa
Coefficient of friction		ASTM D1894	> 0.5	-
Haze		ASTM D1003	6	%
Gloss (45°)		ASTM D2457	60	%

- Data should not be used for specification work

* 50 µm film, 2.5:1 blow-up ratio, 180°C melt temperature - MD = machine direction TD = transverse direction



21H460

Extrusion conditions

21H460 can be processed on all commercial blown line film extruders over the melt temperature range 160 – 185°C. Film can be drawn down approximately 25 μm under ideal extrusion conditions.

Storage

21H460 should be stored in a dry and dust free environment at temperatures below 50°C. Exposure to direct sunlight should be avoided, as this may lead to product deterioration.

Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, send an email to psnohreg@innovene.com. Unless specifically indicated, the products mentioned herein are not suitable for applications in the medical or pharmaceutical sector.

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 Material Safety Data Sheet (MSDS) that may be obtained from the website www.ineospolyolefins.com. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

Exclusion of Liability

Although INEOS POLYOLEFINS endeavours to ensure that all information and advice relating to our materials or other materials howsoever provided to you by INEOS POLYOLEFINS is accurate and up to date, no representation or warranty, express or implied is made by INEOS POLYOLEFINS as to its accuracy or completeness. All such information and advice is provided in good faith and INEOS POLYOLEFINS 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 POLYOLEFINS 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 POLYOLEFINS 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 POLYOLEFINS materials are suitable for the particular purpose intended and INEOS POLYOLEFINS shall not be responsible for any loss or damage caused by misuse of INEOS POLYOLEFINS products. To the maximum extent permitted by law, INEOS POLYOLEFINS 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 POLYOLEFINS materials or the use of INEOS POLYOLEFINS materials in conjunction with such other materials.