

SABIC® LLDPE 222WJ

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LLDPE 222WJ is a linear low density polyethylene resin designed for blown film applications. This resin has a relatively high MFR that makes it an easy processing material. Films made from this resin exhibits high transparency, good toughness and good extrusion characteristics. LLDPE 222WJ contains high levels of both slip agent and Anti-Block.

TYPICAL APPLICATIONS

- General purpose film
- Clothes packaging
- Agriculture film

TYPICAL PROPERTY VALUES

Revision 20230420

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	2.2	g/10 min	ASTM D1238
Density			
Density	0.921	g/cm ³	ASTM D792
OPTICAL PROPERTIES ⁽¹⁾			
Gloss			
Gloss (45°)	55	-	ASTM D2457
Haze ⁽¹⁾	15	%	ASTM D1003
FILM PROPERTIES ⁽¹⁾			
Dart Impact Strength			
Dart Drop Impact	90	g	ASTM D1709
Elmendorf Tear Strength			
Tear Strength, MD	125	g	ASTM D1922
Tear Strength, TD	350	g	ASTM D1922
Tensile test film			
1% secant modulus, MD	205	MPa	ASTM D882
1% secant modulus, TD	255	MPa	ASTM D882
Stress @ Break, MD	35	MPa	ASTM D882
Stress @ Break, TD	30	MPa	ASTM D882
Strain @ Break, MD	765	%	ASTM D882
Strain @ Break, TD	925	%	ASTM D882
THERMAL PROPERTIES			
Melting Point	122	°C	SABIC method

(1) Blown film processing conditions: Extruder Ø55 mm, Die Ø125 mm, Die lip gap 2.0 mm, Temperature 170°C, Output rate 30 kg/h, BUR 2.0, Film thickness 30 µm.

PROCESSING CONDITIONS

Typical processing conditions: 180 - 220 °C

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CHEMISTRY THAT MATTERS™

STORAGE AND HANDLING

Polyethylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

ENVIRONMENT AND RECYCLING

The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. SABIC Europe considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by SABIC Europe whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.

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