

POLYMERS

SABIC[®] MDPE F438J

Enhanced polyethylene for high performance flexible packaging

PRODUCT DESCRIPTION

SABIC[®] MDPE F438J is a Butene Medium-density polyethylene resin typically designed for easy processing and specially formulated for optimum thermal stability at high temperatures used in blown extrusion. Blown film produced from SABIC[®] F438J exhibit good puncture resistance and High Tensile strength properties and tear strength. SABIC[®] F438J is TNPP free. This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL APPLICATIONS

SABIC[®] MDPE F438J resin is typically used for Heavy duty shipping sacks, Agricultural film, STRETCH HOOD and other film genera-purpose application.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES(1)	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate At 190 ^o C and 2.16 Kg	0.4	g/10 min	ASTM D1238
Density	938	Kg/m3	ASTM D1505
FILM PROPERTIES⁽²⁾			
Mechanical Properties			
Dart Impact Strength	2.4	g/μm	ASTM D1709
Puncture Resistance	1.5	J	SABIC Method
ESCR (50 ^o C, 10% Igepal), FO	>1000	Hrs	ASTM D1693B
Tensile Properties			
Stress at break, MD	31.5	MPa	ASTM D882
Stress at break, TD	29	MPa	ASTM D882
Strain at break, MD	480	%	ASTM D882
Strain at break, TD	690	%	ASTM D882
Stress at yield, MD	17	MPa	ASTM D882
Stress at yield, TD	15	MPa	ASTM D882
1% secant modulus, MD	394	MPa	ASTM D882
1% secant modulus, TD	407	MPa	ASTM D882

Elmendorf Tear Strength			
MD	31	g	ASTM D1922
TD	225	g	ASTM D1922
OPTICAL PROPERTIES			
Haze	69	%	ASTM D1003
Gloss			
At 45°	6	-	ASTM D2457

(1) Typical values: not to be construed as specification limits.

(2) Properties have been measured by producing 20 µm film with 2.5 BUR using 100% F438J

Processing Conditions

SABIC® MDPEF438J is extrudable with conventional blown film extrusion equipment. Minor machine modifications may be required for optimum use.

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, available on the Internet (www.SABIC.com).

Additional specific information can be requested via your local Sales Office."

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QUALITY

SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO 9001.

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.

STORAGE AND HANDLING

Polyethylene resins 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 Polyethylene resins within 6 months after delivery.

DISCLAIMER

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