

SABIC® LLDPE MG500026

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LLDPE MG50026 is a high flow Linear Low Density Polyethylene grade with a narrow molecular weight distribution. SABIC® LLDPE MG500026 resin is in powder form and is designed to give excellent flow properties with better low temperature toughness, stress crack resistance and gloss.

TYPICAL APPLICATIONS

SABIC® LLDPE MG500026 is typically used for injection moulding masterbatches where a high filler acceptance is required, Since the resin is supplied in free flowing powder form, it can be used for masterbatch production where PE powders are used. For example, carpet backing, metal coating and compounding for masterbatch production.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

Revision 20220322

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	50	dg/min	ASTM D1238
Density	926	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
ESCR	2	h	ASTM D1693
Hardness Shore D	55	-	ISO 868
Tensile test			
stress at yield	13	MPa	ASTM D638
strain at break	120	%	ASTM D638
secant modulus at 1% elongation	354	MPa	ASTM D638
stress at break	12.4	MPa	ASTM D638
Izod impact notched at 23 °C	450	J/m	ASTM D256A
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 10 N (VST/A)	88	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

PROCESSING CONDITIONS

Typical processing conditions for MG500026 are:

Barrel temperature: 180 - 230 °C

Mold temperature: 15 - 60 °C

Injection pressure: 600-1000 Bar

Material temperature 180 - 230 °C (355 - 450 °F)

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 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.

DISCLAIMER

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