

SABIC® LLDPE M500026

LINEAR LOW DENSITY POLYETHYLENE
REGION ASIA

DESCRIPTION

M500026 is a Linear Low Density Polyethylene grade with narrow molecular weight distribution suitable for injection molding applications. It has been designed to give excellent flow properties with better low temperature toughness, stress crack resistance and gloss.

TYPICAL APPLICATIONS

Lids for closures and containers and deep draw houseware products, automotive parts.

TYPICAL PROPERTY VALUES

Revision 20260508

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	50	g/10 min	ASTM D1238
Density ⁽¹⁾	926	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Flexural properties			
flexural strength	9	MPa	ASTM D790
flexural modulus	200	MPa	ASTM D790
Izod Impact Strength	500	J/m	ASTM D256
Hardness (Shore D)	50	-	ASTM D2240
ESCR ⁽²⁾			
100% Igepal, F50	6	Hrs	ASTM D1693B
10% Igepal, F50	3	Hrs	ASTM D1693B
FILM PROPERTIES			
Tensile Properties ⁽³⁾			
1% secant modulus	240	MPa	ASTM D638
stress at yield	10	MPa	ASTM D638
stress at break	8	MPa	ASTM D638
strain at break	>350	%	ASTM D638
THERMAL PROPERTIES			
Vicat Softening Point	88	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

(1) Test specimens are prepared from compression moulded sheet made according to ASTM D 1928 Procedure C.

(2) Based on compression molded sheet.

(3) Based on injection molded specimens.



PROCESSING CONDITIONS

Typical processing conditions for M500026 are:

Barrel temperature: 180 - 230°C

Mold temperature: 15 - 60 °C

Injection pressure: 600 - 1000 Bar

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.

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