

Product Description

M500026 is 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

M500026 is recommended for lids for closures and containers and deep draw houseware products, automotive parts etc.

Typical data

Properties	Unit	Value ⁽¹⁾	ASTM Method
Resin Properties			
Melt Flow Rate @ 190°C & 2.16 kg load	g/10 min.	50	D 1238
Density @ 23°C	kg/m ³	926	D 1505
Mechanical Properties⁽²⁾			
1% Secant Modulus	MPa	240	D 638
Tensile Strength @ Yield	MPa	10	D 638
Tensile Strength @ Break	MPa	8	D 638
Tensile Elongation @ Break	%	>350	D638
Flexural Strength	MPa	8	D 790
Flexural Modulus	MPa	200	D 790
Izod Impact	J/m	500	D 256
Hardness (Shore D)	-	50	D 2240
ESCR (100% Igepal), F ₅₀ [*]	Hrs	6	D 1693B
ESCR (10% Igepal), F ₅₀ [*]	Hrs	3	
Thermal Properties			
Vicat Softening Point	°C	88	D 1525
Brittleness Temperature	°C	< -75	D 746

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

(2) Based on Injection molded specimens

* Based on Compression molded sheet

Processing Conditions

Typical processing conditions for M500026 are:

Barrel temperature: 180 - 230°C (354 - 444°F)

Mold temperature: 15 - 60°C (60 -140°F)

Injection pressure: 600 - 1000 Bar (8700 - 14500 psi)

Food Regulation

M500026 is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

Storage and Handling

Polyethylene material 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 don't 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.