

SABIC® LLDPE M500026

LINEAR LOW DENSITY POLYETHYLENE

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

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	926	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test			
stress at break	12.4	MPa	ASTM D638
stress at yield	13	MPa	ASTM D638
secant modulus at 1% elongation	354	MPa	ASTM D638
strain at break	120	%	ASTM D638
Izod impact notched at 23 °C	450	J/m	ASTM D256A
Hardness Shore D	55	-	ISO 868
ESCR (100% Igepal CO-630), F50	2	h	ASTM D1693B
THERMAL PROPERTIES			
Brittleness Temperature	<-75	°C	ASTM D746
Vicat Softening Temperature			
at 10 N (VST/A)	88	°C	ASTM D1525

PROCESSING CONDITIONS

Typical processing conditions for M500026 are:

Barrel temperature: 180 - 230°C

Mold temperature: 15 - 60 °C

Injection pressure: 600 - 1000 Bar