

# SABIC<sup>®</sup> 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

Revision 20181012

| PROPERTIES                            | TYPICAL VALUES | UNITS             | TEST METHODS |
|---------------------------------------|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>             |                |                   |              |
| <b>Melt Flow Rate</b>                 |                |                   |              |
| at 190 °C and 2.16 kg                 | 50             | g/10 min          | ASTM D1238   |
| <b>Density</b>                        | 926            | kg/m <sup>3</sup> | ASTM D1505   |
| <b>MECHANICAL PROPERTIES</b>          |                |                   |              |
| <b>Tensile test</b>                   |                |                   |              |
| 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    |
| <b>Izod impact notched at 23 °C</b>   | 450            | J/m               | ASTM D256A   |
| <b>Hardness Shore D</b>               | 55             | -                 | ISO 868      |
| <b>ESCR</b>                           | 2              | h                 | ASTM D1693   |
| <b>ESCR (100% Igepal CO-630), F50</b> | 2              | h                 | ASTM D1693B  |
| <b>THERMAL PROPERTIES</b>             |                |                   |              |
| <b>Brittleness Temperature</b>        | <-75           | °C                | ASTM D746    |
| <b>Vicat Softening Temperature</b>    |                |                   |              |
| 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

## 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](http://www.SABIC.com)). Additional specific information can be requested via your local Sales Office."

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



## 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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