

# SABIC® LLDPE M300024

LINEAR LOW DENSITY POLYETHYLENE

## DESCRIPTION

SABIC® LLDPE M300024 is a linear low density polyethylene copolymer injection moulding and master-batch grade with a narrow molecular weight distribution. It has been typically designed to have good low temperature toughness, stress crack resistance (ESCR) and gloss.

## TYPICAL APPLICATIONS

SABIC® LLDPE M300024 is typically used for injection moulding of large items where high flow and fast cycles are required such as housewares, trash cans, automotive parts, lids and large industrial containers.

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

## TYPICAL PROPERTY VALUES

| PROPERTIES                            | TYPICAL VALUES | UNITS             | TEST METHODS |
|---------------------------------------|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>             |                |                   |              |
| <b>Melt Flow Rate (MFR)</b>           |                |                   |              |
| at 190 °C and 2.16 kg                 | 30             | dg/min            | ASTM D1238   |
| <b>Density</b>                        | 924            | kg/m <sup>3</sup> | ASTM D1505   |
| <b>MECHANICAL PROPERTIES</b>          |                |                   |              |
| <b>Tensile test</b>                   |                |                   |              |
| stress at break                       | 8.5            | MPa               | ASTM D638    |
| stress at yield                       | 12.2           | MPa               | ASTM D638    |
| strain at break                       | 350            | %                 | ASTM D638    |
| secant modulus at 1% elongation       | 360            | MPa               | ASTM D638    |
| <b>Izod impact notched at 23 °C</b>   | 530            | J/m               | ASTM D256A   |
| <b>Hardness Shore D</b>               | 55             | -                 | ISO 868      |
| <b>ESCR (100% Igepal CO-630), F50</b> | 15             | h                 | ASTM D1693B  |
| <b>THERMAL PROPERTIES</b>             |                |                   |              |
| <b>Vicat Softening Temperature</b>    |                |                   |              |
| at 10 N (VST/A)                       | 92             | °C                | ASTM D1525   |
| <b>Brittleness Temperature</b>        | <-75           | °C                | ASTM D746    |

## PROCESSING CONDITIONS

Typical moulding conditions for SABIC® LLDPE M300024 are:

Material temperature: 193 - 232 °C (380 - 450 °F)

Mould temperature: 5 - 30 °C (40 - 85 °F)