

SABIC® HDPE Blow molding BM6246LS

PRODUCT DESCRIPTION

BM6246LS grade is a medium molecular weight High Density Polyethylene homopolymer for blow molding applications. It is primarily designed for imparting high rigidity, toughness and good processability. These unique properties offer the possibility to reduce weight at very good top load strength.

TYPICAL APPLICATIONS

BM6246LS resin is primarily intended for blow molding bottles for the food and beverage industry. This grade meets the latest end consumer expectations regarding purity, healthiness and organoleptics. It combines a high rigidity with superb processing performance, which offers potential for system cost reduction. The grade is very suited for the blow molding of mono as well as multi-layer bottles in several food markets, like fresh, pasteurized and ultra-heat treated milk, sauces, orange juice, functional drinks, probiotics and other "daily shot" drinks. The unique properties offer the possibility to reduce weight at very good top load strength.

TYPICAL DATA

| PROPERTIES | Unit | Value (1) | Test Method |
|----------------------------|----------|-----------|--------------|
| Melt Flow Rate | | | |
| @ 190°C & 2.16 kg load | g/10 min | 0.7 | ASTM D 1238 |
| @ 190°C & 5 kg load | | 2.8 | |
| @ 190°C & 21.6 kg load | | 46 | |
| Density @ 23°C | Kg/m³ | 961 | ASTM D 1505 |
| MECHANICAL PROPERTIES (2) | | | |
| 1% Secant Modulus | MPa | >1000 | ASTM D 638 |
| Tensile Strength @ Yield | MPa | 30 | ASTM D 638 |
| Tensile Strength @ Break | MPa | 18 | ASTM D 638 |
| Tensile Elongation @ Break | % | 500 | ASTM D 638 |
| Flexural Strength | MPa | 28 | ASTM D 790 |
| Flexural Modulus | MPa | 1100 | ASTM D 790 |
| Izod Impact | J/m | 150 | ASTM D 256 |
| Hardness (Shore D) | - | 66 | ASTM D 2240 |
| ESCR (100% Igepal), F50 | Hrs | 24 | ASTM D 1693B |
| ESCR (10% Igepal), F50 | Hrs | 16 | ASTM D 1693B |
| THERMAL PROPERTIES | | | |
| Vicat Softening Point | °C | 127 | ASTM D 1525 |
| Brittleness Temperature | °C | < -75 | ASTM D 746 |

- (1) Typical values: not to be construed as specification limits.
- (2) Based on compression molded sheet.