

SIBUR

Technical Data Sheet PE HD03580 SB High-Density Polyethylene

PRODUCT DESCRIPTION

PE HD03580 SB is a high density hexene copolymer with a bimodal structure providing an outstanding balance of environmental stress crack resistance (ESCR) and stiffness, high rigidity, easy processing and high impact strength. This grade usually allows significant down gauging and is particularly well suited for chemical and detergent market, where a good environmental ESCR is required.

TYPICAL APPLICATIONS

PE HD03580 SB is recommended for Blow Molded containers of up to 30 liters for packaging chemicals, household goods, oil, cosmetics and pharmaceuticals.

| Properties | Conditions | Method | Typical values* | Units |
|--------------------------------|----------------|------------|-----------------|-------------------|
| Rheology | | | | |
| Melt Flow Rate | 190 °C/2.16 kg | ISO 1133-1 | 0.30 | g/10 min |
| Physical | | | | |
| Density | | ISO 1183 | 0.958 | g/cm ³ |
| Mechanical | | | | |
| Tensile Stress at Yield | | ISO 527-1 | 30 | MPa |
| Tensile Strength at Break | | ISO 527-1 | 30 | MPa |
| Elongation at Break | | ISO 527-1 | 550 | % |
| Flexural Modulus | | ISO 178 | 1350 | MPa |
| Charpy Notched Impact Strength | 23 °C | ISO 179 | 12 | kJ/m ² |
| Notched Izod Impact Strength | 23 °C | ASTM D256 | 40 | kJ/m ² |
| BTT Stress Crack Resistance | F50, 100 % | ASTM D1693 | 200 | hours |
| Thermal | | | | |
| Vicat Softening Temperature | 10 N | ISO 306 | 129 | °C |

*The values given are typical values measured on the product. These values should not be considered as specification.