

HPB-0354 High Density Polyethylene

MELT - 0.35

DENSITY - 0.954

HPB-0354 is a certified prime grade Phillips Process BLOW MOLDING copolymer designed to meet end-use requirements of containers for packaging of Household Industrial Chemicals (HIC). **HPB-0354** features medium swell, easy and consistent processability in conventional continuous or intermittent extrusion equipment, and excellent balance of bottle ESCR, impact strength and stiffness. **HPB-0354** recommended processing temperature is 160 to 180°C, with mold at 10 to 30°C. **HPB-0354** complies with FDA regulation 21CFR 177.1520 (c) 3.1 (a) + 3.2(a) and with most international regulations concerning the use of Polyethylene in contact with food articles. **HPB-0354** has a mold temperature of 50.0 to 86.0°F with melt temperature of 320 to 356 °F.

Features:

- Detergent resistant
- Good chemical resistance
- Good processability
- High density
- High ESCR
- High impact resistance
- High stiffness

Typical Applications:

- Medium size containers for detergents, bleach, antifreeze, and motor oil
- Ice chests

| PROPERTIES | ASTM | UNIT | VALUES |
|--|-------|-----------------------|--------|
| PHYSICAL | | | |
| Density | D1505 | g/cm ³ | 0.954 |
| Melt Flow Rate (190°C, 2.16kg) | D1238 | g/10 min | 0.35 |
| Melt Flow Rate (190°C, 21.6kg) | D1238 | g/10 min | 30 |
| Env. Stress Cracking Resistance (122°F, F50) | D1693 | hr | 35.0 |
| MECHANICAL | | | |
| Tensile Strength (Yield) Comp. Mold | D638 | psi | 3900 |
| Tensile Elongation (Break) Comp. Mold | D638 | % | >700 |
| Flexural Modulus - 1% Secant Comp. Mold | D790 | psi | 195k |
| Tensile Impact Strength (Comp. Mold) | D1822 | ft-lb/in ² | 98.0 |
| HDT | D648 | °F | 165 |
| Brittleness Temperature | D746 | °F | < -130 |
| Vicat Softening Temperature | D1525 | °F | 261 |