

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