

High Density Polyethylene BS002W

Description:

BS002W is a High Density Polyethylene (HDPE), copolymer, that can be used to produce thin walled packages. Offers an outstanding combination of impact resistance and stiffness, excellent stress cracking resistance (ESCR), good reproducibility of the weight of bottles and excellent surface.

Applications:

Blow Molded Small Volume: Bottles for cleaning products and surfactant products.

Process:

Blow Molding.

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190°C/2.16kg)	D1238	g/10 min	0.33
Melt Flow Rate (190°C/21.6kg)	D 1238	g/10 min	24
Density	D 792	g/cm ³	0.959

Typical Properties:

Plaque Properties^a

	ASTM Methods	Units	Values
Tensile Strength at Break	D 638	MPa	35
Flexural Modulus – 1% Secant	D 790	MPa	1450
Izod Impact Strength	D 256	J/m	200
Environmental Stress Cracking Resistance ^b	D 1693	h/F50	50
Environmental Stress Cracking Resistance ^c	D 1693	h/F50	150
Deflection Temperature under Load at 0.455 MPa	D 648	°C	75

(a) Test specimens prepared from compression molded sheet made according to ASTM D 4703.

(b) Compression molded 2 mm thickness, 0.3 mm notched-plaques. 10% Igepal. 50°C.

(c) Compression molded 2 mm thickness, 0.3 mm notched-plaques. 100% Igepal. 50°C.

Recommended Processing Conditions:

Temperature Profile:

- Feeding zone: 150°C to 160°C
- Barrel: 160°C to 170°C
- Die: 170°C to 180°C
- Mold Temperature Range: 5°C to 25°C
- Extruders equipped with L/D at least equal to 24

