Braskem

Data Sheet

High Density Polyethylene HS5103

Description:
HS5103 is a high molecular weight high-density polyethylene, copolymer. Suitable for large parts blow molded an L-ring drum. Exhibit a good impact resistance and excellent stress cracking resistance (ESCR).

Applications:
L-ring drum and general large parts blow molded.

Additives:
-

Process:
Blow Molding.

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190°C/21.6kg)	D 1238	g/10 min	2.2
Density	D 792	g/cm^3	0.952

Typical Properties:
Plaque Properties[a]

	ASTM Methods	Units	Values
Tensile Strength at Break	D 638	MPa	30
Flexural Modulus – 1% Secant	D 790	MPa	1200
Charpy Impact Strength at -40°C	D 6110	J/m	NB
Environmental Stress Cracking Resistance[b]	D 1693	h/F50	90
Environmental Stress Cracking Resistance[c]	D 1693	h/F50	320
Deflection Temperature under Load at 0.455 MPa	D 648	ºC	70

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

Recommended Processing Conditions:
Temperature Profile:
- Barrel: 180°C to190ºC
- Head/Die: 200°C to 220°C
- Mold Temperature Range: 5°C to 25°C