Braskem

Data Sheet

High Density Polyethylene HS5010

Description:

HS5010 is a high density polyethylene with high molecular weight, copolymer. Offers good processability, have good stress cracking resistance and low temperature impact resistance.

Applications:

Food packing;
Containers from 5 to 20 liters for chemicals and agrochemicals goods;
Small tanks and bedliner.

Additives:

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Process:

Blow Molding.

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190°C/5kg)	D 1238	g/10 min	0.38
Melt Flow Rate (190°C/21.6kg)	D 1238	g/10 min	10
Density	D 792	g/cm^3	0.948

Typical Properties:

Plaque Properties[a]

	ASTM Methods	Units	Values
Tensile Strength at Break	D 638	MPa	35
Flexural Modulus – 1% Secant	D 790	MPa	1150
Charpy Impact Strength at -40°C	D 6110	J/m	120
Environmental Stress Cracking Resistance[b]	D 1693	h/F50	65
Environmental Stress Cracking Resistance[c]	D 1693	h/F50	>1000
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:

- Feeding zone: 180°C to 190ºC
- Barrel: 190°C to 200ºC
- Head/Die: 190°C to 200ºC
- Maximum mold temperature:30°C