



High Density Polyethylene

Aramco HDPE B5403

Product Description

Aramco HDPE B5403 is a medium molecular weight bimodal high density polyethylene resin and is typically used for blow molding application. Blow molded parts made from this resin typically exhibits high stiffness, good impact strength and good ESCR.

Typical Applications

Small and medium size blow molded containers for household and industrial chemicals.

This product is not intended for use in medical and pharmaceutical applications.

Physical Properties	Unit	Test Method	Value ⁽¹⁾
Melt Flow Index (190°C/2.16kg)	g/10min	ASTM D1238	0.25
Melt Flow Index (190°C/5.0kg)	g/10min	ASTM D1238	1.2
Density	g/cm ³	ASTM D792 Method A	0.954
Mechanical Properties⁽²⁾			
Tensile Strength at Yield	MPa	ASTM D638	27
Tensile Strength at Break	MPa	ASTM D638	34
Tensile Elongation at Break	%	ASTM D638	740
Flexural Modulus	MPa	ASTM D790	1200
Tensile Impact	kJ/m ²	ASTM D1822	200
Izod Impact, Notched 23 °C	kJ/m ²	ASTM D256	10
Izod Impact, Notched -30 °C	kJ/m ²	ASTM D256	5
Hardness Shore D		ASTM D2240	68
ESCR (Igepal 10%) F ₅₀	hour	ASTM D1693	63
Thermal Properties⁽²⁾			
Vicat Softening Temperature @10N	°C	ASTM D1525	127

(1) Typical values only, not to be construed as specification limits

(2) Test specimen preparation method: Pursuant to ASTM D4976

Processing conditions: Recommended melt temperature: 160 – 200 °C

Storage and handling: Aramco HDPE B5403 should be stored in a dry cool place with adequate ventilation and protected from UV-light at temperature below 50 °C

Food Contact and other Regulations: Aramco HDPE B5403 resins are suitable for food contact applications. Detailed information is provided in Material Safety Datasheet and for additional specific information, please contact Saudi Aramco Products Trading Company for certificates.

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