Lotrène® HDPE Q 5502BN

High Density Polyethylene

Q-Chem (Qatar Chemical Company Ltd. - Muntajat)

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Technical Data

Product Description

This high molecular weight hexene copolymer is tailored for lightweight blow molded containers that require:

- Excellent stiffness
- Exceptional processability
- Exceptional stress cracking resistance

Typical applications include:

- Ice chest & coolers
- Household & industrial chemical containers
- Food packaging & pharmaceutical containers
- Bleach & detergents containers

This resin meets these specifications:

- ASTM D4976 – PE 235
- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per 21 CFR 176.170(c)
- Listed in the Drug Master File

General

Material Status	• Commercial: Active		
Literature [1]	• Technical Datasheet (English)		
Availability	• Africa & Middle East	• Asia Pacific	• Europe
Features	• Excellent Processability • Food Contact Acceptable	• Good ESCR (Stress Crack Resist.) • High Molecular Weight	• High Stiffness
Uses	• Containers • Food Packaging	• Household Goods • Industrial Containers	• Pharmaceutical Packaging
Agency Ratings	• ASTM D4976-89-PE235 • DMF	• FDA 21 CFR 176.170(c), Table 2, Cond. B • FDA 21 CFR 176.170(c), Table 2, Cond. H	• FDA 21 CFR 177.1520(c) 3.2a
Processing Method	• Compression Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.955 g/cm³	0.955 g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/2.16 kg	0.35 g/10 min	0.35 g/10 min	
190°C/21.6 kg	33 g/10 min	33 g/10 min	
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693B
100% Igepal, Compression Molded, F50	24.0 hr	24.0 hr	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength [3] (Yield, Compression Molded)	3920 psi	27.0 MPa	ASTM D638
Tensile Elongation [3]			ASTM D638
Break, Compression Molded	> 600 %	> 600 %	
Flexural Modulus - Tangent (Compression Molded)	199000 psi	1370 MPa	ASTM D790

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore D, Compression Molded	63	63	

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