

Hostalen ACP 5231 D

High Density Polyethylene
LyondellBasell Industries

Technical Data

Product Description

Hostalen ACP 5231 D is a high density polyethylene (HDPE) resin used in small blow molding applications such as packaging, consumer goods and toys. It exhibits a very good combination of high stress cracking resistance, stiffness and good chemical resistance. Hostalen ACP 5231 D is delivered in pellet form, demonstrates good organoleptic properties, contains antioxidants and has a broad molecular weight distribution. Hostalen ACP 5231 D is not intended for use in medical and pharmaceutical applications.

General

Material Status	• Commercial: Active		
Literature ¹	• Processing - Mold Shrink (English) • Processing - PE Films (English) • Processing - Polyolefin Injection Molding Guide (English) • Technical Datasheet (English)		
Search for UL Yellow Card	• LyondellBasell Industries • Hostalen		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Antioxidant		
Features	• Antioxidant • Good Processability	• High ESCR (Stress Crack Resist.) • High Impact Resistance	• High Rigidity
Uses	• Blow Molding Applications • Bottles • Industrial Applications	• Jerricans • Packaging • Sporting Goods	• Toys
Forms	• Pellets		
Processing Method	• Extrusion Blow Molding	• Wire & Cable Extrusion	

Physical	Nominal Value Unit	Test Method
Density	0.952 g/cm³	ISO 1183
Apparent Density	> 0.50 g/cm³	ISO 60
Melt Mass-Flow Rate (MFR)		ISO 1133
190°C/2.16 kg	0.30 g/10 min	
190°C/21.6 kg	22 g/10 min	
190°C/5.0 kg	1.2 g/10 min	
Environmental Stress-Cracking Resistance ³	1200 hr	ASTM D1693B
FNCT ⁴ (80°C)	1.3 day	ISO 16770

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	1100 MPa	ISO 527-2
Tensile Stress (Yield)	25.0 MPa	ISO 527-2
Tensile Strain (Yield)	8.0 %	ISO 527-2

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (-30°C)	6.0 kJ/m²	ISO 179/1A
Tensile Impact Strength (-30°C)	75.0 kJ/m²	ISO 8256/1

Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore D)	62	ISO 868
Ball Indentation Hardness (H 132/30)	51.0 MPa	ISO 2039-1

Extrusion	Nominal Value Unit
Melt Temperature	180 to 220 °C