

Hostalen ACP 5831 D

High Density Polyethylene
LyondellBasell Industries

Technical Data			
Product Description			
Hostalen ACP 5831 D is a high density polyethylene (HDPE) resin used in small blow molding applications such as thin-wall packaging, consumer goods and toys. It exhibits a very good combination of high stiffness and high stress cracking resistance. Hostalen ACP 5831 D is delivered in pellet form, demonstrates good organoleptic properties, contains antioxidants and has a broad molecular weight distribution. Hostalen ACP 5831 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	
Additive	• Antioxidant		
Features	• Antioxidant • Good Organoleptic Properties	• High ESCR (Stress Crack Resist.) • High Rigidity	• High Stiffness • Wide Molecular Weight Distribution
Uses	• Blow Molding Applications • Bottles • Consumer Applications	• Jerricans • Packaging • Sporting Goods	• Toys • Vials
Forms	• Pellets		
Processing Method	• Extrusion Blow Molding		
Physical		Nominal Value Unit	Test Method
Density		0.958 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 10% Nonionic Surfactant		150 hr	ASTM D1693B
FNCT ³ (80°C)		8.0 hr	ISO 16770
Mechanical		Nominal Value Unit	Test Method
Tensile Modulus		1350 MPa	ISO 527-2
Tensile Stress (Yield)		28.0 MPa	ISO 527-2
Tensile Strain (Yield)		7.5 %	ISO 527-2
Impact		Nominal Value Unit	Test Method
Charpy Notched Impact Strength (-30°C)		6.5 kJ/m²	ISO 179/1eA
Tensile Impact Strength (-30°C)		75.0 kJ/m²	ISO 8256/1
Hardness		Nominal Value Unit	Test Method
Shore Hardness (Shore D)		64	ISO 868
Ball Indentation Hardness (H 132/30)		60.0 MPa	ISO 2039-1
Extrusion		Nominal Value Unit	
Melt Temperature		180 to 210 °C	