

Histif 5431 Z

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Histif 5431 Z is a high density polyethylene with an excellent combination of stiffness and ESCR and a high impact resistance. It is delivered in pellet form and contains antioxidants. Typical customer applications include L-ring drums for the packaging of dangerous goods. Histif 5431 Z is not intended for use in medical and pharmaceutical applications.

General

Material Status	• Commercial: Active		
Literature ¹	• Processing - Mold Shrink (English) • Processing - Polyolefin Injection Molding Guide (English) • Technical Datasheet - ISO (English)		
Search for UL Yellow Card	• LyondellBasell Industries		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Antioxidant		
Features	• Antioxidant • High ESCR (Stress Crack Resist.)	• High Impact Resistance • High Rigidity	
Uses	• Blow Molding Applications	• Drums	
Forms	• Pellets		
Processing Method	• Extrusion Blow Molding		

Physical	Nominal Value Unit	Test Method
Density	0.954 g/cm ³	ISO 1183
Apparent Density	> 0.50 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	2.6 g/10 min	ISO 1133
Viscosity Number (Reduced Viscosity)	500.0 ml/g	ISO 1628
FNCT ³ (80°C)	14.0 hr	ISO 16770

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	1200 MPa	ISO 527-2
Tensile Stress (Yield)	27.0 MPa	ISO 527-2
Tensile Strain (Yield)	8.0 %	ISO 527-2

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (-30°C)	80 kJ/m ²	ISO 179/1A
Tensile Impact Strength ⁴ (-30°C)	290 kJ/m ²	ISO 8256

Extrusion	Nominal Value Unit
Melt Temperature	180 to 220 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ 3.5 MPa, 2% Igepal BC/9

⁴ Notched