

INEOS HDPE G60-25-144

High Density Polyethylene

INEOS Olefins & Polymers USA

Technical Data

Product Description

G60-25-144 is a high density polyethylene homopolymer typically used in the production of sheet extrusion and blow molded containers. This material meets the Food and Drug Administration requirements of 21CFR 177.1520.

General

Material Status	• Commercial: Active		
Literature ¹	• Processing - Injection Molding (English) • Technical Datasheet (English)		
UL Yellow Card ²	• E31830-100062233		
Search for UL Yellow Card	• INEOS Olefins & Polymers USA		
Availability	• North America		
Features	• Food Contact Acceptable	• High Density	• Homopolymer
Uses	• Blown Containers	• Sheet	
Agency Ratings	• FDA 21 CFR 177.1520		
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets		
Processing Method	• Blow Molding	• Sheet Extrusion	

Physical	Nominal Value Unit	Test Method
Density	0.960 g/cm ³	ASTM D4883
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.25 g/10 min	ASTM D1238
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	1340 MPa	ASTM D638
Tensile Strength ⁴ (Yield)	31.0 MPa	ASTM D638
Tensile Elongation ⁴ (Break)	> 800 %	ASTM D638
Apparent Bending Modulus	862 MPa	ASTM D747
Flexural Modulus - Tangent	1550 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact	210 J/m	ASTM D256
Tensile Impact Strength ⁵	258 kJ/m ²	ASTM D1822
Hardness	Nominal Value Unit	Test Method
Durometer Hardness (Shore D)	66	ASTM D2240
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	80.0 °C	ASTM D648
Brittleness Temperature	< -75.0 °C	ASTM D746
Vicat Softening Temperature	131 °C	ASTM D1525

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 A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL IDES continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ 51 mm/min

⁵ Type L