INEOS HDPE J50-2000-119

High Density Polyethylene Copolymer

INEOS Olefins & Polymers USA

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Technical Data

Product Description

J50-2000-119 is a narrow molecular weight high density polyethylene copolymer intended for applications requiring a glossy finish and reasonably good impact strength and rigidity. It is characterized by a high melt index which allows easy processing of medium to thin walled articles. This material meets the Food and Drug Administration requirements of 21 CFR 177.1520.

General

Material Status	• Commercial: Active		
Literature [1]	• Processing - Injection Molding (English) • Technical Datasheet (English)		
Search for UL Yellow Card	• INEOS Olefins & Polymers USA		
Availability	• North America		
Features	• Copolymer • Food Contact Acceptable • Good Impact Resistance	• Good Processability • High Density • High Gloss	• Medium Rigidity • Narrow Molecular Weight Distribution
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.953 g/cm³	0.953 g/cm³	ASTM D4883
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	20 g/10 min	20 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693B
100% Igepal, F50	1.80 hr	1.80 hr	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength [3]			ASTM D638
Yield, Compression Molded	4000 psi	27.6 MPa	
Break, Compression Molded	2140 psi	14.8 MPa	
Tensile Elongation [3]			ASTM D638
Yield, Compression Molded	9.1 %	9.1 %	
Break, Compression Molded	> 200 %	> 200 %	
Flexural Modulus - Tangent (Compression Molded)	179000 psi	1230 MPa	ASTM D790A
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact (Compression Molded)	0.53 ft·lb/in	28 J/m	ASTM D256
Notched Izod Impact (Area)			ASTM D256
Compression Molded	1.32 ft·lb/in²	2.77 kJ/m²	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Durometer Hardness			ASTM D2240
Shore D, Compression Molded	66	66	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, Compression Molded	162 °F	72.2 °C	
Brittleness Temperature	< -94.0 °F	< -70.0 °C	ASTM D746
Vicat Softening Temperature	257 °F	125 °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] Typical properties: these are not to be construed as specifications.

[3] 2.0 in/min (51 mm/min)

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