

INEOS HDPE J50-1000-187

High Density Polyethylene Copolymer
INEOS Olefins & Polymers USA

Technical Data

Product Description

J50-1000-187 is a high density polyethylene copolymer intended for the injection molding of closures for beverages. Because of its high purity and excellent organoleptic properties, this grade is certified as low taste and is intended for packaging in direct contact with beverages. This resin contains a lubrication package for improved release from the mold and lower application torques on the bottles. This material meets the Food and Drug Administration requirements of 21CFR 177.1520.

Typical Applications

- Caps and closures for the packaging of still water
- Injection molded applications where low taste and odor are critical.

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		
Additive	• Lubricant		
Features	• Copolymer • Food Contact Acceptable • Good Mold Release • Good Organoleptic Properties	• High Density • High Purity • Low Taste Transfer • Low to No Odor	• Lubricated • Narrow Molecular Weight Distribution
Uses	• Caps	• Closures	
Agency Ratings	• FDA 21 CFR 177.1520		
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density	0.951 g/cm³	ASTM D4883
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	11 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance 100% Igepal	3.00 hr	ASTM D1693B
Molecular Weight Distribution	Narrow	Internal Method
Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³ (Yield)	27.6 MPa	ASTM D638
Tensile Elongation ³ (Break)	> 600 %	ASTM D638
Flexural Modulus - Tangent	1210 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact	50 J/m	ASTM D256
Hardness	Nominal Value Unit	Test Method
Durometer Hardness (Shore D)	65	ASTM D2240
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	77.0 °C	ASTM D648
Brittleness Temperature	< -75.0 °C	ASTM D746
Vicat Softening Temperature	128 °C	ASTM D1525

Additional Information

This high performance HDPE product, produced with INEOS propriety leading-edge technology, is protected by Patent US 6,846,863 B2.