

INEOS HDPE B4020N1333

High Density Polyethylene
INEOS Olefins & Polymers USA

Technical Data

Product Description

B4020N1333 is a unique high density polyethylene copolymer intended for the injection or compression 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. It has a broad molecular weight distribution for faster molding cycles and enhanced stress crack resistance. This resin contains a lubrication package for improved release from the mold and lower application torques on the bottle. This material meets the Food and Drug Administration requirements of 21CFR 177.1520.

Typical Applications

- Caps and closures for the packaging of carbonated and other beverages
- Injection and compression 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 • Fast Molding Cycle • Food Contact Acceptable • Good Organoleptic Properties	• Good Tear Strength • High Density • High ESCR (Stress Crack Resist.) • High Purity	• Low to No Odor • Lubricated • Wide Molecular Weight Distribution
Uses	• Caps	• Closures	• Food Packaging
Agency Ratings	• FDA 21 CFR 177.1520		
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets		
Processing Method	• Compression Molding	• Injection Molding	

Physical	Nominal Value Unit	Test Method
Specific Gravity	0.951 g/cm³	ASTM D4883
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.9 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance 10% Igepal, F50	10.0 hr	ASTM D1693B
Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³ (Yield)	28.3 MPa	ASTM D638
Tensile Elongation ³ (Break)	> 700 %	ASTM D638
Flexural Modulus - Tangent	1170 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact	69 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	67.8 °C	ASTM D648
Brittleness Temperature	< -75.0 °C	ASTM D746
Vicat Softening Temperature	126 °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 51 mm/min