

INEOS HDPE B53-35H-100

High Density Polyethylene
INEOS Olefins & Polymers USA

Technical Data

Product Description

B53-35H-100 is a high density polyethylene copolymer developed for injection blow molding. Zinc Stearate is incorporated in the formulation as a release agent. It is recommended for use in applications which require a combination of high top load strength and good environmental stress crack resistance (ESCR). 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)		
Search for UL Yellow Card	• INEOS Olefins & Polymers USA		
Availability	• North America		
Additive	• Stearate		
Features	• Copolymer • Food Contact Acceptable	• Good Mold Release • Good Strength	• High Density • High ESCR (Stress Crack Resist.)
Agency Ratings	• FDA 21 CFR 177.1520		
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets		
Processing Method	• Injection Blow Molding		

Physical	Nominal Value Unit	Test Method
Density	0.955 g/cm ³	ASTM D4883
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.33 g/10 min	ASTM D1238

Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³ (Yield)	27.6 MPa	ASTM D638
Tensile Elongation ³ (Break)	> 700 %	ASTM D638
Apparent Bending Modulus	690 MPa	ASTM D747
Flexural Modulus - Tangent	1240 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact	190 J/m	ASTM D256
Tensile Impact Strength	277 kJ/m ²	ASTM D1822

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	74.0 °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 Typical properties: these are not to be construed as specifications.

³ 51 mm/min