

INEOS HDPE T50-500

High Density Polyethylene
INEOS Olefins & Polymers USA

Technical Data

Product Description

T50-500 is a high density polyethylene copolymer having a narrow molecular weight distribution. It is intended for injection molding applications where a good balance of processability and end-use properties are required. 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		
Features	• Copolymer • Food Contact Acceptable	• Good Processability • High Density	• Narrow Molecular Weight Distribution
Agency Ratings	• FDA 21 CFR 177.1520		
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density	0.953 g/cm³	ASTM D4883
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance 10% Igepal, F50	6.50 hr	ASTM D1693B
Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³ (Yield)	26.9 MPa	ASTM D638
Tensile Elongation ³ (Break)	800 %	ASTM D638
Flexural Modulus - Tangent	1280 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact	64 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	81.0 °C	ASTM D648
Brittleness Temperature	< -75.0 °C	ASTM D746
Vicat Softening Temperature	128 °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