

INEOS HDPE T50-400

High Density Polyethylene
INEOS Olefins & Polymers USA

Technical Data

Product Description

T50-400 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. Typical applications include pails and material handling devices. This material meets the Food and Drug Administration requirements of 21CFR 177.1520. This resin is Kosher certified.

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 • Narrow Molecular Weight Distribution
Uses	• Containers	• Pails
Agency Ratings	• FDA 21 CFR 177.1520	
RoHS Compliance	• Contact Manufacturer	
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	Nominal Value Unit	Test Method
Density	0.952 g/cm³	ASTM D4883
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.7 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance 10% Igepal, F50	8.00 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	85 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	81.1 °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