INEOS HDPE T60-500

High Density Polyethylene

INEOS Olefins & Polymers USA

Technical Data

Product Description
T60-500 is a high density polyethylene homopolymer designed specifically for injection molding. This narrow molecular weight distribution resin is a product of Ineos USA, LLC's innovative technology. Parts fabricated from this material exhibit a glossy surface finish and good impact strength and rigidity. 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	• Food Contact Acceptable • Good Impact Resistance • High Density	• High Gloss • Homopolymer • Medium Rigidity	• 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	0.961	g/cm³	ASTM D4883
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.2	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance			ASTM D1693B
10% Igepal, F50	5.00	hr	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [3] (Yield)	31.0	MPa	ASTM D638
Tensile Elongation [3] (Break)	> 800	%	ASTM D638
Flexural Modulus - Tangent	1550	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	67	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			ASTM D648
0.45 MPa, Unannealed	87.0	°C	
Brittleness Temperature	< -75.0	°C	ASTM D746
Vicat Softening Temperature	129	°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