

High Density Polyethylene (HDPE)

-- Injection Grade Data Sheets

Grade			Rotation	Injection		
			3840	8040	9040	8050
Properties	Unit	Test Method				
Melt Index MI _{2.16}	g/10min	ASTM D1238	5.0	4.0	4.0	6.0
Melt Index MI ₅ /MI _{2.16}	g/10min	ASTM D1238				
Density	g/cm ³	ASTM D1505	0.938	0.957	0.953	0.960
Thermal properties						
Melting point	°C	FPC Method	125	132	131	133
Brittleness point	°C	ASTM D746	<-70	<-70	<-70	<-70
Softening point	°C	ASTM D1525	118	125	122	125
Mechanical properties						
Tensile strength at yield	Kg/cm ²	ASTM D638	150	300	230	310
Tensile strength at break	Kg/cm ²	ASTM D638	220	240	260	240
Elongation at break	%	ASTM D638	>1000	900	900	900
Tensile Impact Strength	kg·cm/cm ²	ASTM D1822	140	200	180	140
Izod Impact Strength	Kg-cm/cm notch	ASTM D256	20	10	12	6
Hardness	Shore D	ASTM D2240	60	69	66	70
ESCR	Hours	ASTM D1693				
Die Swell Ratio	%	FPC Method				
Pinch-off thickness	—	FPC Method				
Electrical properties						
Dielectric Constant 1MHz		ASTM D1531		http://www.upmold.com		
Dissipation Factor 1MHz		ASTM D1531		info@upmold.com		
Volume Resistivity	Ohm-cm	ASTM D257				
Characteristics	Easy Processing		Easy Processing	Easy Processing	Easy Processing	
	High Strength		High Rigidity	High Rigidity	High Rigidity	
Application	Good Low Temperature Brittle Resistance		High Warpage Resistance	High Strength	Good Impact Strength	
			Very Good Impact Strength	High ESCR		
Large Crate Containers		Pails	Pallet	Bottle cap	Crates	
Tank		Waste Carts	Industrial containers	High Toughness Parts	Boxes	
Barricade					Seats	
					Pallet	

PS.: 1. Processing Condition : Injection Temperature= 170 - 190°C
 2. Data shown are average values and should not be examined for specifications ◦
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