



High Density Polyethylene (HDPE) -- Injection Grade Data Sheets

Grade			Rotation	Injection					
			3840	8040	8050	8070	7200 7200F	8230	8300
Properties	Unit	Test Method							
Melt Index $MI_{2.16}$	g/10min	ASTM D1238	4.0	4.0	6.0	6.0	22	21	30
Melt Index $MI_3/MI_{21.6}$	g/10min	ASTM D1238							
Density	g/cm ³	ASTM D1505	0.938	0.953	0.960	0.961	0.955	0.952	0.952
Thermal properties									
Melting point	°C	FPC Method	125	135	135	135	133	131	131
Brittleness point	°C	ASTM D746	<-70	<-70	<-70	<-70	<-70	<-70	<-70
Softening point	°C	ASTM D1525	120	127	127	127	125	129	125
Mechanical properties									
Tensile strength at yield	Kg/cm ²	ASTM D638	150	270	310	310	285	270	270
Tensile strength at break	Kg/cm ²	ASTM D638	260	260	240	240	150	150	150
Elongation at break	%	ASTM D638	>1000	>1000	>1000	>1000	700	>1000	>1000
Tensile Impact Strength	kg·cm/cm ²	ASTM D1822	140	180	140	150	95	90	80
Izod Impact Strength	Kg-cm/cm notch	ASTM D256	20	12	6	8	3.5	4	3
Hardness	Shore D	ASTM D2240	60	67	70	70	67	67	67
ESCR	Hours	ASTM D1693							
Die Swell Ratio	%	FPC Method							
Pinch-off thickness	—	FPC Method							
Electrical properties									
Dielectric Constant 1MHz		ASTM D1531							
Dissipation Factor 1MHz		ASTM D1531							
Volume Resistivity	Ohm-cm	ASTM D257							
Characteristics			Easy Processing High Strength Good Low Temperature Brittle Resistance	Easy Processing High Rigidity High Strength High ESCR	Easy Processing High Rigidity Good Impact	Easy Processing High Rigidity Good Impact High Warpage Resistance	Good Flow Suitable for Fast Cycling-Application	Good Flow Suitable for Fast Cycling-Application High Warpage	
			Large Crate Containers Tank Barricade	Bottle cap	Crates Boxes Seats Pallet		Housewares Thin Walled Food Containers PET bottle base cup ※ 7200F : Fiber grade		
Application									

PS.: 1. Processing Condition : Injection Temperature= 170 - 190°C 、7200F for fiber processing = 250 - 270°C

2. Data shown are average values and should not be examined for specifications .