

POLYETHYLENE / PROPERTIES OF HDPE & LDPE

Injection Molding	
HDPE	LDPE
Melting point: 200°C-300°C (392°F-572°F).	Melting point: 160°C -260°C (320°F-500°F).
Mold temperature: 10°C-80°C (50°F-176°F).	Has a post-mold shrinkage between 1,5% and 3,5%.
Not requires drying when stored properly.	Upper limit of Injection Pressure: Up to 150 MPa
Increasing the mold temperature will improve the appearance of the part providing brightness.	
Mold shrinkage ranges between 1.5% and 3%, depending on factors such as process conditions, rheological properties of the material, and the thickness of the final product.	
Extrusion	
HDPE	LDPE
Melting point: 200°C-300°C (392°F-572°F).	Melting point: 180°C-240°C (356°F-464°F).
Compression Ratio: 3:1	Materials with higher melting points (between 280°C-310°C or between 536°F-590°F) are required for extrusion-coating.
Cylinder Temperatures: 180°C -205°C (356°F-400°F).	A three-zone screw with an L/D ratio of about 25 should be used as an extruder screw.
Pre-Drying: Not required. Regrinding: 3 hours at 105°C-110°C (221°F-230°F).	Has a post-mold shrinkage between 1,5% and 3,5%.