Industrial chemicals

High-density polyethylene (HDPE)

Polyolefin for moulding and extrusion

HDPE



Material illustration

Technical characteristics

High-density polyethylene (HDPE) is a rigid thermoplastic for hollow articles, pipes and moulded parts. A blow-moulded container, a pressure pipe and a rotationally moulded tank require different resin selections.

Property	Reference value	Method or source
Designation	**HDPE**	Plastics Europe · Polyolefins
Melt mass-flow rate	**ISO 1133-1**	ISO 1133-1:2022
Density	**ISO 1183-1**	ISO 1183-1
MFR / MVR	**g/10 min / cm³/10 min**	ISO 1133-1:2022

Compare density and melt flow rate at a stated test temperature and load. Environmental stress-crack resistance matters for containers. Rotomoulding also requires assessment of powder size and the finished article's impact strength.



Applications

Blow moulding serves bottles and jerrycans, and extrusion serves pipes and profiles. Tank projects may require rotational moulding and powdered feedstock. Pressure pipe requires documented pipe-compound classification.



Packaging and receipt

Pellets can be supplied in sealed bags on pallets or in bulk bags by arrangement. Clean lots free of foreign matter are important for automatic feeding. Resin form and net weight are stated in the offer.

For acceptance, check the agreed specification and the certificate of analysis (COA) for the delivered lot.