HM 0349 PE

Technical Data Sheet

Polyethylene, High Density. Natural Grade

HIGH DENSITY POLYETHYLENE. NATURAL GRADE

Product Description

HM 0349 PE is a natural high density polyethylene copolymer (with 1-Hexene).

HM 0349 PE is a basic component of compounds for the production of pressure piping components.

HM 0349 PE is characterized by outstanding environmental stress crack resistance, high stiffness, high impact strength and good processability.

Product Characteristics

Application	Pressure Pipes Components
Processing Method	Extrusion. Injection Molding
Market	Pressure Pipes
Features	Natural resin. Pressure Pipes Components. Bimodal

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt flow rate (MFR) (190°C/2.16kg)	0.07	g/10 min	ISO 1133
Melt flow rate (MFR5) (190°C/5.0kg)	0.30	g/10 min	ISO 1133
Melt flow rate (HLMI) (190°C/21.6kg)	8.5	g/10 min	ISO 1133
Density	0.949	g/cm³	ISO 1183
Mechanical			
Tensile Modulus (1 mm/min)	900	MPa	ISO 527
Tensile Strenght at Yield, (23°C, 50 mm/min)	23	MPa	ISO 527
Elongation at Break, (23°C, 50 mm/min)	600	%	ISO 527
Thermal			
Vicat Softening Point (1 kg)	125	°C	ISO 306
Chemical			
ESCR (Condition C)	≥5000	hour	ISO 18553

Notes

These are typical property values not to be construed as specification limits

REACH

Polyethylene are exempted from registration under REACH. However, the corresponding monomers (used as raw materials for polymer production) and relevant additives have been registered. Please see related Declaration of Compliance for Plastic Food Contact Materials (DoC for PFCM).

Packaging

Polyethylene pellets is typically packed in polyethylene bags with net weight of 25kg each. 50 bags are stacked on a flat wooden pallet (dimensions: 1100mm x 1300mm x 150mm) with net weight of 1250kg per pallet that is stretch-hood film wrapped. Upon agreement with a customer PE pellet can be packed into big bag sized for 1000kg on wooden pallet (dimensions: 1140mm x 1140mm x 150mm) without stretch-hood film wrapping.

Storage

Polyethylene product packed in 25kg bags or 1000kg big bags stacked on wooden pallet shall be stored in enclosed dry place preventing from direct sunlight at least 1 meter far from heaters, at temperature min. -15°C / max. 35°C, relative humidity max. 80%. Prior to processing PE product bags shall be kept in production area for at least 12 hours.

PE shelf life is 60 months from the date of manufacture.

Extrusion Guidelines

for HDPE Pipe Grade Resins

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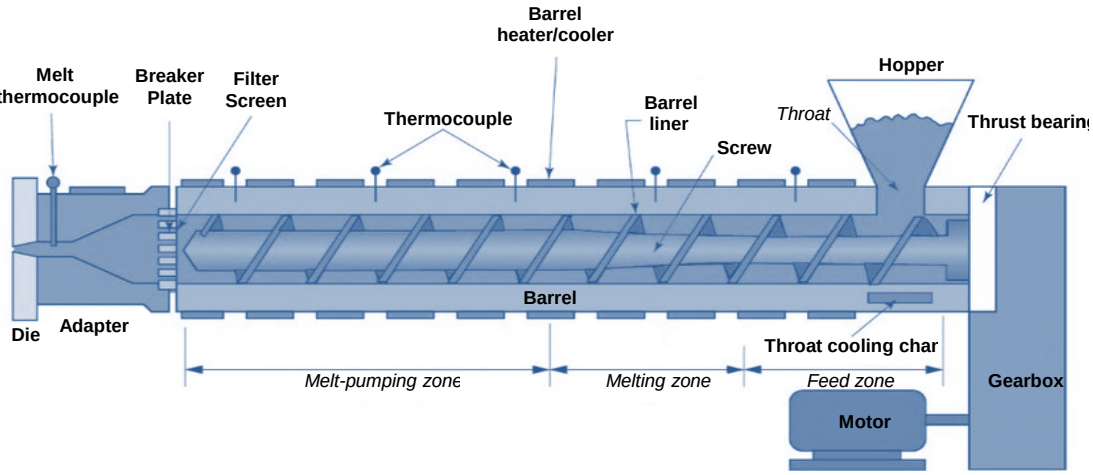
SOCAR Polymer offers an exclusive line of HDPE grades that are successfully used for the commercial production of pipes. These HDPE pipe grades run successfully on various types and designs of extruders to produce pipe over 1600mm in diameter.

SOCAR Polymer HDPE pipe grade materials extrude well at conditions similar to those traditionally used to process other PE pipe materials. We recommend the following typical extrusion parameters:

Cylinder/Barrel Temperatures	180-205 °C
Head Temperature	190-205 °C
Die Temperature	190-205 °C
Melt Temperature	200-220 °C



Typical extruder