

Product data sheet

> HDPE made via Hostalen Process



HM-5010T2N (EX3)

HM-5010T2N (EX3) is a pipe grade resin which is manufactured by suspension polymerization of ethylene monomer. HM-5010T2N (EX3) is a bi-model high density polyethylene with 1-Butene as co monomer.

HDPE: HM-5010T2N (EX₃)

Characteristic Properties



- Tough and rigid pipe resin.

Density: 0.943-0.947 g/cm³

Main Applications



- Pressure pipes, e.g. drinking-water and gas pipes, waste pipes and sewer pipes, their fittings and also sheets (UV stabilization and pigments during processing)

MFR 190/5: 0.39-0.51

Additives



- Antioxidant/Process stabilizer
- Lubricant (processing aid) /acid scavenger

Material properties (This data are typical values and are not to be construed as product specifications.)

Resin Properties	Unit	Typical Value	Test Method
Melt Index (21.6)	(g/10 min)	12	ISO 1133
Melt Index (5)	(g/10 min)	0.45	ISO 1133
FRR (21.6/5)		27	
Density	g/cm ³	0.945	ISO 1183
Moulded Properties	Unit	Typical Value	Test Method
Notched Impact @ 23 °C	mJ/mm ²	12	ISO 179/ 1 eA
Mechanical Properties	Unit	Typical Value	Test Method
Hydrostatic Strength (80 °C)	h	(4.0 N/mm ²) 1000	ISO 1167

Handling and Health Safety

Molten polymers could be injured skin or eye so safety glasses and appropriate gloves are suggested to prevent possible thermal injuries. Also appropriate ventilation is suggested in working by melt polymer.

Accumulation of fines or dust particles that are in this grade is not suitable because of explosion hazard probability. So adequate filters and grounding exists at all time are recommended.

Storage

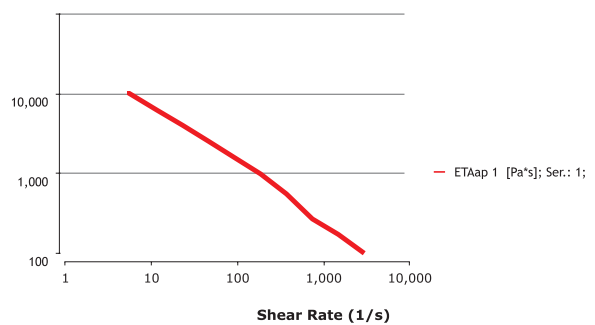
Polyethylene products (in pelletised or powder form) should not be stored in direct sunshine and/or heat radiation. Ultraviolet cause a change in the material properties. The Storage area should be dry and preferably don't exceed 50 °C. Under cool, dry, dark conditions Jam Polymers polyolefin resins are expected to maintain the original material and processing properties for at least 18 month. JPC would not responsible about quality diminishing such as color change, bad smell or etc which caused by bad storage conditions. It is better to process PE resin within 6 months after delivery.

packaging

Jam Polymers Polyolefin resins are supplied in Pellet form packed in 25kg bags. Alternative packaging modes are available for selected grades.

- On compression moulded according to ASTM D1928C
Processing Conditions
Recommended barrel temperatures range between 190 °C and 280 °C.

Shear-Viscosity @ 190 °C



The above values were
Calculated from data for 100 µm
produced
on a 75mm Barrnage
extruder with 190°C melt tem-
perature using a 2:1 blow ratio
and a gap die of 3.0 mm.