

Technical Data Sheet**LOW DENSITY PE FOR INJECTION MOULDING & MASTERBATCH RESIN****GENERAL :**

Indothene 16MA400 is an injection molding grade film grade Low Density Polyethylene (LDPE) produced by high pressure tubular process adopting process know-how of M/s. Atochimie, France. The high melt flow index makes it ideal for moulding of very thin, intricate and large items having adequate mechanical properties. This grade is also an ideal choice for making masterbatches with higher loading.

Indothene is the brand name of Low Density Polyethylene (LDPE) manufactured and marketed by Indian Petrochemicals Corporation Limited.

FOOD CONTACT APPLICATIONS :

This grade meets the requirements of Indian Standard IS-10146-1982 on "Polyethylene for its safe use in contact with food stuffs, pharmaceuticals and drinking water". It also conforms to the positive list of constituents as approved in IS:10141:1982. The grade complies with FDA regulation : CFR title 21 , 177.1520, Olefin polymer .

TYPICAL CHARACTERISTICS :

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE
Melt Flow Index (190°C / 2.16 Kg)	ASTM D 1238	gm/10 min.	30
Density (23°C)	ASTM D 1505	gm/cm ³	0.918
Melting range	ASTM D 2117	°C	98-100
Tensile Strength (Yield)	ASTM D 638	Kg/cm ²	90
Elongation (Yield)	ASTM D 638	%	40
Flexural Modulus	ASTM D 790	Kg/cm ²	1,400
Izod Impact Strength (Notched)	ASTM D 256	Kg.cm/cm	No break
Vicat Softening Point	ASTM D 1525	°C	84

The Mechanical properties are based on IM specimens (type I of ASTM D638) of 3.2 mm thickness

PROCESSING : Indothene 16MA400 can be conveniently processed on either screw pre-plasticising or plunger injection molding machines. The processing condition would depend on mould design, product design, residence time in the barrel etc. However as a general guide line for moulding following moulding conditions may be recommended

Temperature Profile (°C)

Cylinder Temperature	160-250
Nozzle Temperature	200-250
Injection pressure (kg/cm ²)	600-800
Mould temperature (°C)	30-50

APPLICATIONS : Some of the typical applications are given below :

- Large shopping baskets
- Artificial flowers and fruits
- Masterbatches
- Powder coating

PACKAGING : Indothene 16MA400 is available in natural colour, pellet form in 25 kg bags.