

Technical Data Sheet

SEMI HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE FOR MEDIUM VOLUME BLOW MOLDED CONTAINERS

GENERAL :

Indothene-HD 52GB003 is a Semi High Molecular Weight High Density Polyethylene blow molding grade with high stiffness and impact strength and good ESCR produced by Stirred Tank Heavy Diluent (STHD) process adopting process know-how of M/s. Basell, Germany. It possesses medium molecular weight distribution, very good swell and easy processability. Indothene-HD 52GB003 can readily be processed on most HDPE blow moulding machines.

Indothene-HD is the brand name of High Density Polyethylene (HDPE) 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 / 5.0 Kg)	ASTM D 1238	gm/10 min.	0.45
Melt Flow Index (190°C / 21.6 Kg)	ASTM D 1238	gm/10 min.	8.5
Density (23°C)	ASTM D 1505	Gm/cm ³	0.952
Tensile Strength at Yield	ASTM D 638	Kg/cm ²	290
Elongation at Yield	ASTM D 638	%	11
Flexural Modulus	ASTM D 790	Kg/cm ²	10,000
Notched izod impact strength	ASTM D 256	Kg-cm/cm	No Break
Vicat Softening Point	ASTM D 1525	°C	125

Note : Based on injection moulded 3.2 mm thick type I specimen of ASTM D638

PROCESSING : The following processing conditions can be adopted for 52GB003 :

Temperature Profile (°C)

Barrel	180/190/200/210
Die	210/200

APPLICATIONS : Some of the typical applications are given below :

- Light weight containers from 15-100 lts capacity for food products, adhesives, chemicals etc.
- Thin liners for chemicals & pesticides drums.
- Blow moulded technical parts with complex geometry (petrol tanks, ducts etc)
- Any other Medium volume containers.

PACKAGING : Indothene -HD 52GB003 is available in natural colour, pellet form in 25 kg bags.