

## High Density Polyethylene

## Injection Moulding

### Product Description:

**HDPE 180M50** is a high density polyethylene manufactured using Nova Chemicals' Solartech Solution Polymerization Technology. It is a natural coloured polymer with excellent flow properties, very good processability and excellent gloss.

**BIS Designation Code** for HDPE 180M50 as per IS

7328:2020 is: **IS 7328-3B-MBQ-EDE.**

Need pricing, availability, or technical support? Explore our website - [www.iitsy.in](http://www.iitsy.in)

### Recommended Applications:

**HDPE 180M50** is recommended for manufacturing injection moulded components like:

- Injection moulded Housewares
- Thin Walled moulded products

### Typical Properties:

Tested Properties	Test Method	UOM	Values*
<b>Resin Properties</b>			
Melt Flow Index (190°C & 2.16Kg)	ASTM D1238	g/10min	22.0
Density @ 23°C	ASTM D792	g/cm <sup>3</sup>	0.950
<b>Mechanical Properties</b>			
Tensile Strength @ Yield (Type-IV)	ASTM D638	MPa	22
Elongation @ Yield (Type-IV)	ASTM D638	%	12
Flexural Modulus	ASTM D790	MPa	750
Notched Izod Impact Strength @ 23°C	ASTM D256	J/m	35
Hardness	ASTM D2240	Shore D	55
<b>Thermal Properties</b>			
Vicat Softening Point	ASTM D1525	°C	121

\* Typical values not to be construed as specification limits. Values may change without any prior notice.

\* Mechanical Properties tested on Injection Moulded test specimens.

**Recommended Processing Temperature: 180 – 210°C**

### Packaging Information:

This material is packed and available in raffia bags with net content of 25.0 Kg only. The raffia bags used conforms to the minimum strength requirements of BIS, however, customer shall take due care while handling the bag. Prolonged exposure of these bags to sunlight may deteriorate the bag's performance and cause spillage and wastage. IOCL does not warranty loss of material due to poor material handling practices.

### Storage & Handling:

Prevent HDPE Material from direct exposure to sunlight & heat to avoid quality deterioration. The storage location should be dry, dust free and the storage temperature should not exceed **50°C**. Non-compliance to these precautionary measures can lead to degradation of the product causing colour changes, odor and inadequate product performance. It is advised to process HDPE material within 06 months of delivery.

### Regulatory Information:

HDPE 180M50 meets the "Specification for Polyethylene for safe use in contact with Foodstuff, Pharmaceuticals and Drinking water" as per IS: 10146-1982. It also conforms to the positive list of constituents as per IS: 16738-2018. The grade and Additives incorporated shall meet with FDA: CFR Title21, 177.1520, Olefin Polymers.

### Disclaimer:

IOCL assumes no liability whatsoever in respect of application, processing or any use made of the aforementioned information or products, or any consequence thereof. No liability whatsoever shall be attached to any of the IOCL companies for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of application, processing or use of the aforementioned information or products by the user.

Need pricing, availability, or technical support? Explore our website - [www.iitsy.in](http://www.iitsy.in)



**Registered Office Address →**  
G-9, Aliyavar Jung Marg,  
Bandra (East), Mumbai - 400051  
Maharashtra, India.

**Contact Address →**  
Product Application and Development Center (PADC),  
Near Panipat Naptha Cracker Complex,  
Village – Baljattan, Panipat – 132140, Haryana, India

**Contact Details →**  
Tel : +91-180-2526702, 2526708  
Fax : +91-180-2528651  
Web : <https://propel.indianoil.in>