

# HDPE 180M50

## High Density Polyethylene

## Injection Molding

### Product Description

180M50 is a High Density Polyethylene manufactured using Nova Chemical's Sclairtech Solution Polymerisation Technology.

180M50 is a natural coloured polymer with excellent flow properties, very good processability and excellent gloss.

HDPE 180M50 is designed for injection molded house ware and thin wall moulded products.

### Typical Properties\*

| S.No | Property                | Test Method | Unit    | Value** |
|------|-------------------------|-------------|---------|---------|
| 1    | Density                 | ASTM D 1505 | g/cc    | 0.95    |
| 2    | Melt Flow Index         | ASTM D 1238 | g/10min | 18      |
| 3    | Tensile Strength @yield | ASTM D 638  | Mpa     | 24      |
| 4    | Elongation at yield     | ASTM D 638  | %       | 12      |
| 5    | Flexural modulus        | ASTM D 790  | Mpa     | 900     |
| 6    | Hardness                | ASTM D 2240 | Shore D | 70      |
| 7    | Vicat Softening Point   | ASTM D 1525 | °C      | 124     |

\* Typical values not to be taken as specification

\*\* Typical properties are on injection molded specimen.

### Processing Guidelines

Processing Temperature (°C): 180 - 215

### Regulatory Requirements

HDPE 180M50 shall meet "Specification for Polyethylene for safe use in contact with Foodstuff, Pharmaceuticals and Drinking water" as per IS: 10146-1982. It also confirms to the positive list of constituents as per IS: 10141-1982. The grade and Additives incorporated shall meet with FDA: CFR Title21, 177.1520, Olefin Polymers.

### 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.