

## High Density Polyethylene

## Injection Molding

### Product Description:

080M60U is a High Density Polyethylene manufactured using Nova Chemical's Sclairtech Solution Technology.

080M60U is a natural colored polymer with UV stabilized, good processability, very good mechanical properties and good ESCR properties.

### Recommended Applications:

HDPE 080M60U is designed to suite the following application areas:

- Injection molded crates
- Paint pails for outdoor applications.

### Typical Properties:

Tested Properties	Test Method	UOM	Values*
<b>Resin Properties</b>			
Melt Flow Index (190°C & 2.16 Kg)	ASTM D 1238	gm/10 min	8.0
Density @ 23°C	ASTM D 1505	gm/cm <sup>3</sup>	0.960
<b>Mechanical Properties</b>			
Tensile Yield Strength	ASTM D 638	MPa	25
Elongation at Yield	ASTM D 638	%	11
Elongation at Break	ASTM D 638	%	>800
Flexural Yield Strength	ASTM D 790	MPa	20
Flexural Modulus	ASTM D 790	MPa	850
Notched Izod Impact Strength @ 23°C	ASTM D 256	J/m	90
Hardness	ASTM D 2240	Shore D	55
<b>Thermal Properties</b>			
Vicat Softening Point (10 N)	ASTM D 1525	°C	127

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

\* Mechanical properties tested on injection molded specimen.

**Recommended Processing Temperature: 180 – 215 °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.

### Regulatory Information:

HDPE 080M60U 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 Title 21, 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 of the product causing Color changes, Odor & inadequate product performance. It is advised to process HDPE material within 06 months after delivery.

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