

## Linear Low Density Polyethylene

## Rotational Molding

### Product Description:

042R35U is a medium density polyethylene manufactured using Nova Chemical's Sclairtech Solution Polymerization Technology.

042R35U is a natural colored polymer, adequately stabilized with UV stabilizer to give a long service with continuous outdoor exposure with or without blending of any carbon black.

### Recommended Applications:

LLDPE 042R35U is designed to make rotomolded container for outdoor exposure like:

- Overhead water tanks
- Toys and Furniture's

### Typical Properties:

Tested Properties	Test Method	UOM	Values*
<b>Resin Properties</b>			
Melt Flow Index (190 <sup>o</sup> C & 2.16 Kg)	ASTM D 1238	gm/10 min	4.8
Density @ 23 <sup>o</sup> C	ASTM D 1505	gm/cm <sup>3</sup>	0.935
<b>Mechanical Properties</b>			
Tensile Yield Strength	ASTM D 638	MPa	15
Ultimate Tensile Strength	ASTM D 638	MPa	20
Elongation at Break	ASTM D 638	%	>600
Flexural Yield Strength	ASTM D 790	MPa	13
Flexural Modulus	ASTM D 790	MPa	450
Notched Izod Impact Strength @ 23 <sup>o</sup> C	ASTM D 256	J/m	>500
Hardness	ASTM D 2240	Shore D	55
<b>Thermal Properties</b>			
Vicat Softening Point (10 N)	ASTM D 1525	°C	117

\* 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: 170 – 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:

LLDPE 042R35U 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 LLDPE 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 LLDPE material within 06 months after delivery.

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