

# LL9640U / LL9640UP

## Linear Low Density Polyethylene Resin

**Special Characteristics :** InnoPlus LL9640U and LL9640UP are hexene comonomer based linear low density polyethylene designed for rotational molding applications. These are UV8 resistance level rotational molding grades which provide an excellent impact strength and good end use performance with optimizing the balance between stiffness and environmental stress cracking resistance.

InnoPlus LL9640UP is a powder form of InnoPlus LL9640U.

**Typical Applications :** InnoPlus LL9640U and LL9640UP can be used to produce variety applications such as general molding, toys & playground equipment, outdoor storage containers, medium to large water tanks and chemical tanks.

### Typical Properties :

Properties	LL9640U / LL9640UP	Unit	Test Method
<i><b>Physical Properties</b></i>			
Melt Flow Rate (190 °C, 2.16 kg)	4.0	g/10 min	ASTM D1238
Density	0.932	g/cm <sup>3</sup>	ASTM D792
Brittleness Temperature	< -70	°C	ASTM D3418
Vicat Softening Point	110	°C	ASTM D1525
Heat Distortion Temperature @ 0.455 MPa	54	°C	ASTM D648
<i><b>Mechanical Properties (Compression specimens)*</b></i>			
Tensile Strength at Yield	15	MPa	ASTM D638
Tensile Strength at Break	25	MPa	ASTM D638
Elongation @ Break	1000	%	ASTM D638
Flexural modulus	550	MPa	ASTM D790
Durometer Hardness	56	Shore D	ASTM D2240
ESCR, F <sub>50</sub> (Condition A 100% Igepal)	> 1000	Hours	ASTM D1693
Arm Impact Strength @ -40°C (3 mm Rotomolded sample)	74	J	ARM Method

### Processing Condition :

The recommended oven temperature is in the range of 260 - 290 °C.

### FDA Statement :

LLDPE under the brand InnoPlus complies with U.S. FDA 21 CFR 177.1520 (c) (2.1) and (2.2) regulation for polyethylene used in articles that contact food suitable for articles used for packaging or holding food during cooking.

### Disclaimer :

This Applications specified herein is for reference only and not suitable for using in the manufacturing of any products in medical and pharmaceutical sectors.

- Determination of suitability of the product for the use and purpose shall be the customer's responsibility. Customer is obligated to inspect and test the product for such suitability. Customer is responsible for appropriate, safe, legal use processing and handling of the product.
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**Note :** Properties reported here are typical values of the product, not to be considered as specifications.

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