



# LL9450U / LL9450UP

# Linear Low Density Polyethylene Resin

Special Characteristics : InnoPlus LL9450U and LL9450UP are butene co-monomer based linear low density polyethylene which are designed for rotational molding applications. These are UV8 stabilized rotational molding grades which provide a balance of flow and stiffness, good impact strength, toughness and color stability. InnoPlus LL9450UP is a powder form of InnoPlus LL9450U

**Typical Applications** : InnoPlus LL9450U and LL9450UP can be used to produce variety applications such as general molding, toys & playground equipment, outdoor storage containers and water tanks.

**Typical Properties :** 

| Properties                                           | LL9450U / LL9450UP | Unit              | Test Method |
|------------------------------------------------------|--------------------|-------------------|-------------|
| Physical Properties                                  |                    |                   |             |
| Melt Flow Rate (190 °C, 2.16 kg)                     | 5.0                | g/10 min          | ASTM D1238  |
| Density                                              | 0.935              | g/cm <sup>3</sup> | ASTM D792   |
| Brittleness Temperature                              | <-70               | °C                | ASTM D3418  |
| Vicat Softening Point                                | 114                | °C                | ASTM D1525  |
| Heat Distortion Temperature @ 0.455 MPa              | 55                 | °C                | ASTM D648   |
| Mechanical Properties (Compression specimens         | <u>)*</u>          |                   |             |
| Tensile Strength at Yield                            | 17                 | MPa               | ASTM D638   |
| Tensile Strength at Break                            | 24                 | MPa               | ASTM D638   |
| Elongation @ Break                                   | 1000               | %                 | ASTM D638   |
| Flexural modulus                                     | 600                | MPa               | ASTM D790   |
| Durometer Hardness                                   | 56                 | Shore D           | ASTM D2240  |
| Arm Impact Strength @ -40°C (3 mm Rotomolded sample) | 58                 | 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 :

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