

TECHNICAL DATA SHEET

SP-M-3940U

Linear Low Density Polyethylene Powder for Rotational Molding

DESCRIPTION

GREENETHENE **SP-M-3940U** is a Low-Density Linear Polyethylene Resin (LLDPE) in powder form, additivated with antioxidants and UV stabilizers. It is suitable for Rotational Molding applications. Items produced by GREENETHENE **SP-M-3940U** have a very good balance between mechanical properties and ESCR resistance.

| <i>Typical Properties</i> | <i>Test Method</i> | <i>Unit</i> | | <i>Value*</i> | |
|--|--------------------|--------------------|------|---------------|-----|
| <i>Melt Flow Index (190 °C/2.16 Kg)</i> | ASTM D1238 | gm/10 min | | 4 | |
| <i>Density (23 °C)</i> | ASTM D1505 | gm/cm ³ | | 0.939 | |
| <i>ESCR (F-50, 100% Igepal)</i> | ASTM D1693 | hr | | >550 | |
| <i>Vicat Softening Point</i> | ASTM D1525 | °C | | 118 | |
| <i>Hardness</i> | ASTM D2240 | D | | 60 | |
| <i>UV Stability (ASTM G155)</i> | ASTM D2565 | Hrs | | 8000 | |
| <i>Elongation at Break</i> | ASTM D638 | % | | 700 | |
| <i>Notched Izod Impact Strength</i> | ASTM D256 | Kg.cm/cm | 25 | J/m | 245 |
| <i>Tensile Strength at Yield</i> | ASTM D638 | Kg/cm ² | 204 | Mpa | 20 |
| <i>Tensile Strength at Break</i> | ASTM D638 | Kg/cm ² | 255 | Mpa | 25 |
| <i>ARM Low Temp Impact Strength (3.17mm)</i> | ARM (- 40) | ft.lbs | 70 | J | 95 |
| <i>Flexural Modulus</i> | ASTM D790 | Kg/cm ² | 7650 | Mpa | 750 |

*The above are typical properties and are not to be construed as specifications. Tests were done on natural, unpigmented resin. User is advised to make its own determination and assessment of the suitability of this product for its intended use. Synergy Polytek FZC make no warranty expressed or implied regarding the suitability of this product in application.

REGULATORY INFORMATION

GREENETHENE **SP-M-3940U** meets the requirement stipulated in standard **IS:10141:2001** on “Specification for Polyethylene for safe use in contact with foodstuff, pharmaceuticals & Drinking Water”. It also conforms to standard **IS 12701:1996** – “Specification for Rotational Molded Polyethylene Water Storage Tanks.”.

PROCESSING CONDITIONS

Recommended PIAT is 190-200 °C. Bags should be stored in dry/closed conditions at temp below 50 °C.

APPLICATIONS



Road Safety Items



Pallets



Logistics



Underground Application



Automotive Parts

