

# TECHNICAL DATA SHEET

## SP-T-3832U

Linear Low Density Polyethylene Powder for Rotational Molding

### DESCRIPTION

GREENETHENE **SP-T-3832U** is a Hexene Co-polymer based Linear Low Density Polyethylene Resin (LLDPE) in powder form which is designed for Rotational molding applications, additivated with antioxidants and UV stabilized. Items produced by GREENETHENE **SP-T-3832U** have an excellent stiffness and a very good balance between mechanical properties like impact strength 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		3.2	
<i>Density (23 °C)</i>	ASTM D1505	gm/cm <sup>3</sup>		0.938	
<i>ESCR (F<sub>50</sub>, 100% Igepal, 3mm specimen)</i>	ASTM D1693	hr		>1000	
<i>Brittleness Temperature</i>	ASTM D746	°C		< - 70	
<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	%		1000	
<i>Notched Izod Impact Strength</i>	ASTM D256	Kg.cm/cm	20 (No Break)	J/m	196 (No Break)
<i>Tensile Strength at Yield</i>	ASTM D638	Kg/cm <sup>2</sup>	204	Mpa	20
<i>Tensile Strength at Break</i>	ASTM D638	Kg/cm <sup>2</sup>	306	Mpa	30
<i>ARM Low Temp Impact Strength (3.17mm)</i>	ARM (- 40)	ft.lbs	75	J	100
<i>Flexural Modulus</i>	ASTM D790	Kg/cm <sup>2</sup>	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-T-3832U** 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 **IS 12701:1996** –“Specification For Rotational Moulded 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.

### APPLICATION



Large Size  
Water Storage Tanks



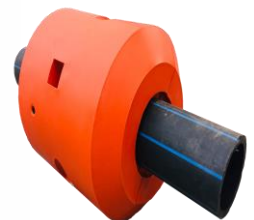
Automotive  
Parts



Chemical Tanks



Insulated Containers



Floater

