

# TECHNICAL DATA SHEET

## SP-T-3840U

Linear Low Density Polyethylene Powder for Rotational Molding

### DESCRIPTION

GREENETHENE **SP-T-3840U** 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-3840U** have an excellent stiffness and a very good balance between mechanical properties like impact strength and ESCR resistance.

Typical Properties	Test Method	Unit		Value*	
Melt Flow Index (190 °C/2.16 Kg)	ASTM D1238	gm/10 min		4	
Density (23 °C)	ASTM D1505	gm/cm <sup>3</sup>		0.938	
ESCR (F <sub>50</sub> , 100% Igepal, 3mm specimen)	ASTM D1693	hr		>500	
Brittleness Temperature	ASTM D746	°C		< - 70	
Vicat Softening Point	ASTM D1525	°C		118	
Hardness	ASTM D2240	D		57	
UV Stability (ASTM G155)	ASTM D2565	Hrs		8000	
Elongation at Break	ASTM D638	%		950	
Notched Izod Impact Strength	ASTM D256	Kg.cm/cm	50 (Partial Break)	J/m	490 (Partial Break)
Tensile Strength at Yield	ASTM D638	Kg/cm <sup>2</sup>	204	Mpa	20
Tensile Strength at Break	ASTM D638	Kg/cm <sup>2</sup>	255	Mpa	25
ARM Low Temp Impact Strength (3.17mm)	ARM (- 40)	ft.lbs	68	J	92
Flexural Modulus	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-3840U** 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



Medium Size  
Water Storage Tanks



Marine  
Buoys



Medical Equipments



Insulated Containers



Floater

