

TECHNICAL DATA SHEET

SP-Q-3935U

Linear Low Density Polyethylene Powder for Rotational Molding

DESCRIPTION

GREENETHENE **SP-Q-3935U** 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-Q-3935U** 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			3.5
Density (23 °C)	ASTM D1505	gm/cm ³			0.939
ESCR (F ₅₀ , 100% Igepal, 3mm specimen)	ASTM D1693	hr			>1000
Brittleness Temperature	ASTM D746	°C			< - 70
Vicat Softening Point	ASTM D1525	°C			118
Hardness	ASTM D2240	D			60
UV Stability (ASTM G155)	ASTM D2565	Hrs			8000
Elongation at Break	ASTM D638	%			660
Notched Izod Impact Strength	ASTM D256	Kg.cm/cm	36	J/m	350
Tensile Strength at Yield	ASTM D638	Kg/cm ²	175	Mpa	17
Tensile Strength at Break	ASTM D638	Kg/cm ²	195	Mpa	19
ARM Low Temp Impact Strength (3.17mm)	ARM (- 40)	ft.lbs	68	J	92
Flexural Modulus	ASTM D790	Kg/cm ²	5610	Mpa	550

*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-Q-3935U** 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

