

## LLHR-440U Medium Density Polyethylene

MELT - 4.0

DENSITY - 0.940

**LLHR-440U** is a certified prime grade UV and Thermal Stabilized Ethylene-Hexene Copolymer designed for high performance outdoor exposure Rotomolded applications. **LLHR-440U** is melt compounded for uniform dispersion of Long Term Thermal and UV stabilization additives, supplied in pellet form of natural color. **LLHR-440U** features very good moldability, outstanding long-term exposure, and superior combination of ESCR, low temperature impact strength, toughness and stiffness. POWDER version **LLHR-440UP** is available in form of 35 mesh powder ground pellets. **LLHR-440U** and **LLHR-440UP** comply with FDA regulation 21CFR 177.1520(c) 3.1(a) + 3.2(a) and most international regulations concerning the use of Polyethylene in contact with food articles.

### Features:

- Good impact resistance
- Good moldability
- Good UV resistance
- High ESCR (Stress Crack Resist.)
- Low temperature impact resistance
- Good stiffness
- Good toughness

### Typical Applications:

- Chemical and agricultural tanks up to 1000 gallons
- Small portable fuel containers (1-2 gallons)
- Waste carts
- Kayaks and other recreational boats
- Playground equipment
- Toys

PROPERTIES	ASTM	UNIT	VALUES
<b>PHYSICAL</b>			
Density	D1505	g/cm <sup>3</sup>	0.940
Melt Flow Rate (190°C, 2.16kg)	D1238	g/10 min	4.0
Env. Stress Cracking Resistance (122°F, 0.0689 in, 100% Igepal, compression molded, F50) Notched Bent Strip	D1693	hr	>1000
<b>MECHANICAL (Compression Mold)</b>			
Tensile Strength (Yield, 2.0 in/min)	D638	psi	2700
Tensile Elongation (Break, 2.0 in/min)	D638	%	17
Flexural Modulus - 1% Secant (0.051 in/min)	D790	psi	112k
Low Temperature Impact (-40 °F)	Internal	ft-lb	70.1
HDT (66psi, Unannealed)	D648	°F	144
Vicat Softening Temperature	D1525	°F	244