



MARPOL® LL6R 802

Marco Polo International, LLC - Linear Low Density Polyethylene

Wednesday, November 29, 2023

General Information

Product Description

MARPOL LL6R 802 is a polyethylene resin designed for rotational applications that require high stiffness, exceptional low temperature impact properties and excellent ESCR performance. This resin is UV stabilized, has a broad processing window and superior whiteness for improved part appearance.

Recommended Applications: Very large tanks, septic and agricultural tanks

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• UV Stabilizer		
Features	• High ESCR (Stress Crack Resist.) • High Stiffness	• Low Density • Low Temperature Impact Resistance	• UV Stabilized
Uses	• Agricultural Tanks	• Septic Tanks	• Tanks
Appearance	• White		

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.942	g/cm ³	ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	2.0	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) (F50)	< 1000	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	22.8	MPa	ASTM D638
Tensile Elongation (Yield)	11	%	ASTM D638
Flexural Modulus - 1% Secant	1030	MPa	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	62.8	°C	ASTM D648
Deflection Temperature Under Load 1.8 MPa, Unannealed	42.8	°C	ASTM D648
Melting Temperature	127	°C	

Notes

¹ Typical properties; these are not to be construed as specifications.