



MARPOL® LL6R 805

Marco Polo International, LLC - Linear Low Density Polyethylene

Monday, December 11, 2023

General Information

Product Description

Recommended Applications: Playground equipment, toys, agricultural storage tanks, medium tanks, drums and chemical storage tanks.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Food Contact Acceptable	• Low Density	
Uses	• Agricultural Tanks • Drums	• Industrial Tanks • Tanks	• Toys
Agency Ratings	• FDA 21 CFR 177.1520		

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density	0.935	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (190°C/2.16 kg)	5.0	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
10% Igepal, Compression Molded, F50	300	hr	
100% Igepal, Compression Molded, F50	> 1000	hr	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	18.6	MPa	ASTM D638
Tensile Elongation ² (Yield)	12	%	ASTM D638
Flexural Modulus ³	689	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Impact Strength (-40°C, 3.18 mm)	61	J	ARM
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	50.0	°C	

Notes

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

² 50 mm/min

³ 1.3 mm/min