



MARPOL® HDB 502

Marco Polo International, LLC - High Density Polyethylene

Wednesday, September 14, 2022

General Information

Product Description

This resin complies with FDA regulation 21 CFR 177.1520 (c)3.1a, and may be used as articles or components of articles intended for packaging or holding food, except during cooking.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Food Contact Acceptable	• High Density	
Uses	• Food Packaging	• Packaging	
Agency Ratings	• FDA 21 CFR 177.1520(c) 3.1a		

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density	0.953	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (190°C/2.16 kg)	0.32	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			
F50	30.0	hr	ASTM D1693
F50	> 500	hr	ASTM D2561
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	27.6	MPa	ASTM D638
Flexural Modulus	1240	MPa	ASTM D790
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	66		ASTM D2240

Notes

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