



MARPOL® HDM 550

Marco Polo International, LLC - High Density Polyethylene

Tuesday, July 25, 2023

General Information

Product Description

MARPOL® HDM 550 is an HDPE resin designed for part thinwalling in injection molding applications. This resin displays good processability and stiffness/impact balance. This resin has a narrow molecular weight distribution and high flow for processing ease.

Recommended Applications

Thin-walled containers, food containers and freezer containers

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Processability • High Density	• High Flow • Narrow Molecular Weight Distribution	
Uses	• Containers	• Food Containers	• Thin-walled Containers
Processing Method	• Injection Molding		

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)	50	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)	6.00	hr	ASTM D1693B
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	20.9	MPa	ASTM D638
Tensile Strength (Break)	14.4	MPa	ASTM D638
Tensile Elongation (Yield)	9.0	%	ASTM D638
Tensile Elongation (Break)	37	%	ASTM D638
Flexural Modulus - 2% Secant	576	MPa	ASTM D790B
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength	90.4	kJ/m ²	ASTM D1822
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	-52.8	°C	ASTM D746

Notes

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