

MARPOL® HDM 540

High Density Polyethylene

Marco Polo International, Inc.

Message:

MARPOL® HDM 540 is a high-flow "freezer" grade resin that exhibits enhanced cold temperature impact performance, enhanced processing, and thermal stability with good color and organoleptic properties.

Recommended Applications: Rigid food containers such as 4-, 5- and 6- quart ice cream containers that are produced in fast cycling multi-cavity stack molds.

General Information			
Features	Food Contact Acceptable		
	Good Color Stability		
	Good Organoleptic Properties		
	Good Processability		
	Good Thermal Stability		
	High Flow		
	Low Temperature Impact Resistance		
	Low Temperature Resistant		
Uses	Food Containers		
	Low Temperature Applications		
	Rigid Food Packaging		
Agency Ratings	FDA 21 CFR 177.1520(c) 3.1a		
Processing Method	Extrusion		
	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density	0.948	g/cm ³	ASTM D1505
Apparent Density	0.59 to 0.62	g/cm ³	ASTM D1895
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	40	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	62		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ¹ (Break)	21.8	MPa	ASTM D638
Tensile Elongation ² (Break)	5.4	%	ASTM D638
Flexural Modulus - 1% Secant ³	985	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	23	J/m	ASTM D256
Unnotched Izod Impact (-18°C)	360	J/m	ASTM D4812

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa, Unannealed)	63.9	°C	ASTM D648
Vicat Softening Temperature	121	°C	ASTM D1525
Peak Melting Temperature	127	°C	ASTM D3418

NOTE

1. Type IV, 50 mm/min
2. Type IV, 50 mm/min
3. 13 mm/min

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

