ExxonMobil Signature Polymers

ExxonMobil™ HD 5403.AS

High Density Polyethylene

Product Description

ExxonMobil™ HD 5403.AS is a blow molding grade high density polyethylene copolymer containing an antistat additive. It provides a good balance of stiffness and stress crack resistance.

General

Availability [1]	▪ Africa & Middle East ▪ Europe	▪ Latin America ▪ North America	
Additive	▪ Thermal Stabilizer: Yes	▪ Antistatic: Yes	
Applications	▪ Drainage Pipes ▪ Food Packaging	▪ Household and Industrial chemical containers ▪ Pharmaceutical Packaging	▪ Thermoformed Parts ▪ Thin Gauge Sheet
Form(s)	▪ Pellets		
Revision Date	▪ 08/21/2020		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.954	g/cm³	0.954	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	0.30	g/10 min	0.30	g/10 min	ASTM D1238

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	160	°F	71	°C	ASTM D648
Vicat Softening Temperature	261	°F	127	°C	ASTM D1525
Peak Melting Temperature	268	°F	131	°C	ExxonMobil Method
Crystallization Peak, Tc	244	°F	118	°C	ExxonMobil Method

Molded Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield	4100	psi	28	MPa	ASTM D638
Flexural Modulus					
1% Secant : 0.051 in/min (1.3 mm/min)	150000	psi	1000	MPa	ASTM D790A
2% Secant	120000	psi	850	MPa	ASTM D790
Environmental Stress-Crack Resistance					ASTM D1693B
100% Igepal	30	hr	30	hr	
Durometer Hardness (Shore D, 15 sec)	62		62		ASTM D2240

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Charpy Notched Impact Strength					ISO 179/1eA
-4°F (-20°C)	2.4	ft·lb/in²	5.0	kJ/m²	
73°F (23°C)	4.3	ft·lb/in²	9.0	kJ/m²	

Additional Information

All molded properties were measured on compression molded plaques. ExxonMobil™ HD 5403.AS is NSF® -51 Certified and UL recognized. Contact your ExxonMobil Chemical representative for details.

Legal Statement

This product is not intended for use in medical applications and should not be used in any such applications.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

Notes

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

[1] Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

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For additional technical, sales and order assistance: Contact Us

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