

Paxon™ AL55-003

High Density Polyethylene Resin

Product Description

Paxon™ AL55-003 is a high density polyethylene blow molding grade offering a good combination of stiffness and stress crack resistance.

General

Availability ¹	<ul style="list-style-type: none"> Africa & Middle East Europe 	<ul style="list-style-type: none"> Latin America North America 	
Additive	<ul style="list-style-type: none"> Thermal Stabilizer: Yes 	<ul style="list-style-type: none"> Antistatic: No 	
Applications	<ul style="list-style-type: none"> Drainage Pipes Food Packaging 	<ul style="list-style-type: none"> Household and Industrial chemical containers Pharmaceutical Packaging 	<ul style="list-style-type: none"> Thermoformed Parts Thin Gauge Sheet
Form(s)	<ul style="list-style-type: none"> Pellets 		
Revision Date	<ul style="list-style-type: none"> 08/21/2020 		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.954 g/cm ³	0.954 g/cm ³	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	167 °F	75 °C	ASTM D648
Vicat Softening Temperature	261 °F	127 °C	ASTM D1525
Peak Melting Temperature	268 °F	131 °C	ExxonMobil Method
Crystallization Peak, T _c	244 °F	118 °C	ExxonMobil Method

Molded Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	4100 psi	29 MPa	ASTM D638
Tensile Strength at Break			ASTM D638
2.0 in/min (50 mm/min)	2900 psi	20 MPa	
Elongation at Yield	9 %	9 %	ASTM D638
Flexural Modulus			
1% Secant : 0.051 in/min (1.3 mm/min)	160000 psi	1100 MPa	ASTM D790A
2% Secant	130000 psi	910 MPa	ASTM D790
Environmental Stress-Crack Resistance			ASTM D1693B
100% Igepal	30 hr	30 hr	
Durometer Hardness (Shore D, 15 sec)	63	63	ASTM D2240

Impact

	Typical Value (English)	Typical Value (SI)	Test Based On
Charpy Notched Impact Strength			ISO 179/1eA
-4°F (-20°C)	2.9 ft-lb/in ²	6.0 kJ/m ²	
73°F (23°C)	4.8 ft-lb/in ²	10 kJ/m ²	

Additional Information

All molded properties were measured on compression molded plaques. AL55-003 is NSF® -51 Certified and UL recognized. Contact your ExxonMobil Chemical representative for details. AL55-003 has US Pharmacopoeia & European Pharmaceutical recognition.

Legal Statement

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

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

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.

Paxon™ AL55-003
High Density Polyethylene Resin

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

©2022 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com