

ExxonMobil™ AXO3BE3

Polypropylene Impact Copolymer

Product Description

ExxonMobil™ AXO3BE3 is a high crystallinity, medium impact copolymer resin designed for injection-molded automotive interior applications and large appliance parts applications requiring high melt flow rate and excellent processing attributes.

General

Availability ¹	- Latin America - North America
Features	- Fast Molding Cycle - Good Flow - Good Stiffness - Impact Modified - Nucleated
Uses	- Appliances - Automotive Applications - Automotive Interior Parts - Compounding - Consumer Applications - Industrial Applications
Appearance	Natural Color
Form(s)	Pellets
Processing Method	Injection Molding
Revision Date	09/25/2023

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	35 g/10 min	35 g/10 min	ASTM D1238
Density	0.900 g/cm ³	0.900 g/cm ³	ExxonMobil Method

Mechanical	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield			ASTM D638
2.0 in/min (51 mm/min)	3670 psi	25.3 MPa	
Tensile Stress at Yield	3600 psi	24.8 MPa	ISO 527-2/50
Elongation at Yield (2.0 in/min (51 mm/min))	4.4 %	4.4 %	ASTM D638
Tensile Strain at Yield	4.1 %	4.1 %	ISO 527-2/50
Flexural Modulus - 1% Secant			
0.051 in/min (1.3 mm/min)	203000 psi	1400 MPa	ASTM D790A
0.51 in/min (13 mm/min)	232000 psi	1600 MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	197000 psi	1360 MPa	ISO 178

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact			ASTM D256A
0°F (-18°C)	0.80 ft-lb/in	43 J/m	
73°F (23°C)	1.4 ft-lb/in	75 J/m	
Notched Izod Impact Strength			ISO 180/1A
-40°F (-40°C)	2.3 ft-lb/in ²	4.8 kJ/m ²	
-4°F (-20°C)	2.5 ft-lb/in ²	5.3 kJ/m ²	
73°F (23°C)	4.4 ft-lb/in ²	9.3 kJ/m ²	
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.6 ft-lb/in ²	3.4 kJ/m ²	
-4°F (-20°C)	2.1 ft-lb/in ²	4.5 kJ/m ²	
32°F (0°C)	2.4 ft-lb/in ²	5.0 kJ/m ²	
73°F (23°C)	3.7 ft-lb/in ²	7.7 kJ/m ²	

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)	131 °F	55.0 °C	ISO 75-2/A
Heat Deflection Temperature (0.45 MPa)	208 °F	98.0 °C	ISO 75-2/Bf
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	226 °F	108 °C	ASTM D648
DTUL (66 psi) - Annealed	248 °F	120 °C	ASTM D648

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	91	91	ASTM D785

ExxonMobil™ AXO3BE3
Polypropylene Impact Copolymer

Legal Statement

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

This product, including the product name, shall not be used or tested in any medical application without the prior written acknowledgement of ExxonMobil Chemical as to the intended use. For detailed Product Stewardship information, please contact Customer Service.

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.

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

©2024 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