



# ExxonMobil™ AP3N

## Polypropylene Impact Copolymer

### Product Description

A medium impact copolymer resin designed for appliance applications requiring good stiffness and fast cycle time.

### General

Availability <sup>1</sup>	• Asia Pacific		
Features	• Fast Molding Cycle	• High Stiffness	• Medium Impact Resistance
	• High Gloss	• Medium Flow	• Nucleated
Uses	• Appliance Components	• Appliances	• Consumer Applications
Appearance	• Natural Color		
Form(s)	• Pellets		
Processing Method	• Injection Molding		
Revision Date	• 03/11/2019		

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

Mechanical	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield 2.0 in/min (51 mm/min)	4150 psi	28.6 MPa	ASTM D638
Tensile Stress at Yield	4080 psi	28.1 MPa	ISO 527-2/50
Elongation at Yield (2.0 in/min (51 mm/min))	4.6 %	4.6 %	ASTM D638
Tensile Strain at Yield	4.7 %	4.7 %	ISO 527-2/50
Flexural Modulus - 1% Secant 0.051 in/min (1.3 mm/min)	229000 psi	1580 MPa	ASTM D790A
0.51 in/min (13 mm/min)	259000 psi	1780 MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	228000 psi	1570 MPa	ISO 178

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact 0°F (-18°C)	0.91 ft-lb/in	49 J/m	ASTM D256A
73°F (23°C)	2.1 ft-lb/in	110 J/m	
Notched Izod Impact Strength -40°F (-40°C)	1.8 ft-lb/in <sup>2</sup>	3.8 kJ/m <sup>2</sup>	ISO 180/1A
-4°F (-20°C)	2.2 ft-lb/in <sup>2</sup>	4.6 kJ/m <sup>2</sup>	
73°F (23°C)	4.5 ft-lb/in <sup>2</sup>	9.4 kJ/m <sup>2</sup>	
Charpy Notched Impact Strength -22°F (-30°C)	2.1 ft-lb/in <sup>2</sup>	4.4 kJ/m <sup>2</sup>	ISO 179/1eA
-4°F (-20°C)	2.2 ft-lb/in <sup>2</sup>	4.6 kJ/m <sup>2</sup>	
32°F (0°C)	3.2 ft-lb/in <sup>2</sup>	6.7 kJ/m <sup>2</sup>	
73°F (23°C)	6.2 ft-lb/in <sup>2</sup>	13 kJ/m <sup>2</sup>	
Gardner Impact -20°F (-29°C), 0.125 in (3.18 mm), Geometry GC	143 in-lb	16.2 J	ASTM D5420

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)	129 °F	54.0 °C	ISO 75-2/A9 °C
Heat Deflection Temperature (0.45 MPa)	213 °F	101 °C	ISO 75-2/B9 °C
Deflection Temperature Under Load (DTUL) at 66psi – Unannealed	232 °F	111 °C	ASTM D6449 °C
DTUL at 66psi – Annealed	250 °F	121 °C	ASTM D6449 °C

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	99	99	ASTM D785

## Notes

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

<sup>1</sup> 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 please contact our sales representative

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