



Energy lives here™

ExxonMobil™ PP for healthcare and medical applications

As a long-term supplier in the healthcare and medical industry, ExxonMobil Chemical is committed to supplying high-quality polypropylene resins. Polypropylene is a versatile material, offering performance flexibility for healthcare and medical applications in a cost-effective way. It is usable in practically all conversion processes.

Key benefits



Supply reliability

- World-scale manufacturing sites
- Integrated feedstock for reliable supply



Product consistency

- Good Manufacturing Practices in place to prevent product contamination



Stable product portfolio

- Stable portfolio helps to maximize cost-effectiveness

Healthcare and medical applications

- Medical devices: syringes, filters and sprays
- Labware: pipette tips and diagnostic tools
- Medical device packaging: containers, caps and closures
- Drug packaging and delivery systems: inhaling systems including aerosols and nasal inhalers, drug and vitamin tubes, containers and pre-filled syringes

Sterilization techniques

Polypropylene is available for all sterilization techniques, including:

- Heat sterilization (autoclave)
- Chemical sterilization (ethylene oxide)
- Radiation sterilization (gamma, e-beam)

The following ExxonMobil™ PP grades are available for healthcare and medical applications.

Table 1:

Homopolymer	Test method (Based on)	Unit	PP1013H1	PP1014H1
Melt-mass flow rate – MFR (230°C/2.16kg)	ISO 1133	g/10 min	7.5	16
Tensile stress at yield	ISO 527-2/50	MPa	33.5	32.9
Flexural modulus	ISO 178	MPa	1480	1440
Notched Izod impact strength (23°C)	ISO 180/1A	kJ/m ²	3.1	2.6
Typical applications	-	-	Caps, closures, containers, and inhalers	
Typical features	-	-	Low residual	
Random copolymers	Test method (Based on)	Unit	PP9074MED	
Melt-mass flow rate – MFR (230°C)	ASTM D1238	g/10 min	24	
Tensile strength at yield (2.0 in/min)	ASTM D638	psi	4390	
Flexural modulus - 1% secant	ASTM D790A	psi	165000	
Notched Izod impact strength (23°C)	ASTM D256A	ft-lb/in	1.2	
Haze ¹	ASTM D1003	%	8.9	
Typical applications	-	-	Syringes, diagnostic applications	
Typical features	-	-	High transparency, clarified, radiation resistant	

The products, including the products' names, shall not be used or tested in any medical application without the prior written acknowledgement of ExxonMobil Chemical as to the intended use.

¹ 0.04 in injection molded plaque

Compliance information

Regulatory status of select ExxonMobil PP grades:

Table 2:

Grades	European Pharmacopeia (EuroPharm)			ISO 10993 ¹	US Pharmacopeia	
	3.1.3	3.1.6	3.2.2		USP Class VI ²	DMF ³
PP1013H1	●	●	●	● ●	● ●	● (15657)
PP1014H1	●	●	●	● ●	● ●	● (15657)
PP9074MED	●	●	●	●	● ●	● (6677)

● ExxonMobil certificates available ● Third party analysis reports available ● No certificates available

¹ Included ISO 10993 testing according to chapter 5, 6, 10 and 11. Included USP Class VI testing.

² For PP1013H1 and PP1014H1: combined analysis with ISO10993 following blue book memorandum

³ Drug Master File Information correct as September 1, 2019. To confirm current status, please contact your ExxonMobil Chemical representative.

Contact us for more information:
exxonmobilchemical.com/pp



Information correct as September 1, 2019. To confirm current status, please contact your ExxonMobil Chemical representative.

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