

SpectraSyn™ MaX 3.5

Advanced Polyalphaolefin (PAO) Fluid

Product Description

SpectraSyn™ MaX 3.5 is the next generation Polyalphaolefin (PAO) that leverages a unique structure to achieve an exceptional low viscosity, low volatility balance. SpectraSyn™ MaX 3.5 PAO offers improved oxidative stability, enhanced lubricity and traction, excellent low-temperature properties and improved flashpoint versus conventional PAO. SpectraSyn™ MaX 3.5 PAO delivers step-out performance for fuel efficiency improvements as the primary basestock for synthetic lubricants for engine oil and driveline applications. SpectraSyn™ MaX 3.5 PAO also offers improved energy efficiency and thermal management benefits for electric vehicle driveline and e-motor applications and more broadly, enables improved energy efficiency in industrial applications.

General

Availability ¹	<ul style="list-style-type: none"> ▪ Africa & Middle East ▪ Asia Pacific 	<ul style="list-style-type: none"> ▪ Europe ▪ Latin America 	<ul style="list-style-type: none"> ▪ North America
Revision Date	<ul style="list-style-type: none"> ▪ 03/10/2021 		

Basics	Typical Value (English)	Typical Value (SI)	Test Based On
Specific Gravity ² (60.1°F (15.6°C))	0.817	0.817	ASTM D4052
Appearance (0°F (-18°C))	Bright & Clear	Bright & Clear	Visual
Color	< 0.5	< 0.5	ASTM D1500
Kinematic Viscosity ²			ASTM D445
212°F (100°C)	3.5 cSt	3.5 mm ² /s	
104°F (40°C)	14.3 cSt	14.3 mm ² /s	
-40°F (-40°C)	1670 cSt	1670 mm ² /s	
Viscosity Index	129	129	ASTM D2270
Pour Point	< -108 °F	< -78 °C	ASTM D5950/D97
Flash Point, COC	453 °F	234 °C	ASTM D92
Noack Volatility ²	< 11.6 wt%	< 11.6 wt%	ASTM D5800/DIN 51581
Water	< 9 ppm	< 9 ppm	ASTM D6304
Total Acid Number	< 0.02 mg KOH/g	< 0.02 mg KOH/g	ASTM D974 (mod)

Flow	Typical Value (English)	Typical Value (SI)	Test Based On
Apparent Viscosity by Mini-Rotary Viscometer ²			ASTM D4684
-40°F (-40°C)	1317 cP	1317 cP	
Brookfield Viscosity ² (-40°F (-40°C))	1255 cP	1255 cP	ASTM D2983
Cold Cranking Simulator ²			ASTM D5293
-22°F (-30°C)	518 cP	518 cP	
-31°F (-35°C)	790 cP	790 cP	

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Density Correction Factor ³	6.73E-4 (g/cm ³)/°C	6.73E-4 (g/cm ³)/°C	ASTM D1250
Fire Point, COC ²	489 °F	254 °C	ASTM D92
Evaporation Loss ² (401°F (205°C), 6.5 hr)	4.0 wt%	4.0 wt%	ASTM D972 (mod)
Vapor Pressure ³ (302°F (150°C))	0.2 mm Hg	0.2 mm Hg	ASTM D2879

Performance	Typical Value (English)	Typical Value (SI)	Test Based On
Dielectric Constant ³ (77°F (25°C))	2.08	2.08	ASTM D924
Dielectric Strength ³	34.0 kV	34.0 kV	ASTM D877
High-Temp. High-Shear Viscosity ²	1.29 cP	1.29 cP	ASTM D5481

Solubility	Typical Value (English)	Typical Value (SI)	Test Based On
Aniline Point ³	244.9 °F	118.3 °C	ASTM D611

Additional Information

Technical White Mineral Oil, 21 CFR 178.3620(b)
National Sanitation Foundation (NSF) White book, category code H1, Lubricants with incidental food contact

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Legal Statement

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.

² Single sample or two sample average determinations

³ Calculated

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

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