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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. This product is registered on the LuSC list and can be used to formulate EcoLabel, and other Environmentally Acceptable Lubricants.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Revision Date	▪ 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

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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

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: Contact Us

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