ExxonMobil

SpectraSyn™ 6

Polyalphaolefin (PAO) Fluid

Product Description

SpectraSyn™ Low Viscosity Polyalphaolefin (PAO) basestocks feature low temperature properties, low volatility, and improved thermal stability. SpectraSyn™ Low Viscosity PAO products have high viscosity indices which translate to improved flow at low temperatures and increased film thickness at high temperatures. SpectraSyn™ Low Viscosity PAO products are the primary basestocks for synthetic lubricants used in passenger car engines, heavy-duty diesel engines, transmissions, gear boxes and a variety of industrial applications.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Revision Date	▪ 07/01/2019		

Basics	Typical Value (English)		Typical Value (SI)		Test Based On
Specific Gravity (60.1°F (15.6°C))	0.827		0.827		ASTM D4052
Appearance (0°F (-18°C))	Bright & Clear		Bright & Clear		Visual
Color	< 0.5		< 0.5		ASTM D1500
Kinematic Viscosity					ASTM D445
212°F (100°C)	5.8	cSt	5.8	mm^2/s	
104°F (40°C)	31.0	cSt	31.0	mm^2/s	
-40°F (-40°C) [2]	7800	cSt	7800	mm^2/s	
-65°F (-54°C) [2]	68500	cSt	68500	mm^2/s	
Viscosity Index	138		138		ASTM D2270
Pour Point	-71	°F	-57	°C	ASTM D5950/D97
Flash Point, COC	475	°F	246	°C	ASTM D92
Noack Volatility	6.4	wt%	6.4	wt%	ASTM D5800/DIN 51581
Water	< 50	ppm	< 50	ppm	ASTM D6304
Refractive Index [2] (77°F (25°C))	1.4565		1.4565		ASTM D1218
Total Acid Number	< 0.05	mg KOH/g	< 0.05	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)	6500	cP	6500	cP	
Brookfield Viscosity [2] (-40°F (-40°C))	7310	cP	7310	cP	ASTM D2983
Cold Cranking Simulator [2] (-22°F (-30°C))	2260	cP	2260	cP	ASTM D5293

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Density Correction Factor [2]	6.28E-4	$(g/cm^3)/°C$	6.28E-4	$(g/cm^3)/°C$	ASTM D1250
Fire Point, COC [2]	511	°F	266	°C	ASTM D92
Evaporation Loss [2] (302°F (150°C), 22.0 hr)	1.4	wt%	1.4	wt%	ASTM D972
Evaporation Loss [2] (401°F (205°C), 6.5 hr)	10.3	wt%	10.3	wt%	ASTM D972 (mod)
Vapor Pressure [2] (302°F (150°C))	0.1	mm Hg	0.1	mm Hg	ASTM D2879

Performance	Typical Value (English)		Typical Value (SI)		Test Based On
Dielectric Constant [2] (77°F (25°C))	2.11		2.11		ASTM D924
Dielectric Strength [2]	39.4	kV	39.4	kV	ASTM D877
High-Temp. High-Shear Viscosity [2]	2.08	cP	2.08	cP	ASTM D5481

Solubility	Typical Value (English)		Typical Value (SI)		Test Based On
Aniline Point [2]	259.0	°F	126.1	°C	ASTM D611
Kauri-Butanol Value [2]	10.9		10.9		ASTM D1133

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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

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

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