

# 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 <sup>1</sup>	<ul style="list-style-type: none"> <li>▪ Africa &amp; Middle East</li> <li>▪ Asia Pacific</li> </ul>	<ul style="list-style-type: none"> <li>▪ Europe</li> <li>▪ Latin America</li> </ul>	<ul style="list-style-type: none"> <li>▪ North America</li> </ul>
Revision Date	<ul style="list-style-type: none"> <li>▪ 07/30/2015</li> </ul>		

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 <sup>2</sup> /s	
104°F (40°C)	31.0 cSt	31.0 mm <sup>2</sup> /s	
-40°F (-40°C) <sup>2</sup>	7800 cSt	7800 mm <sup>2</sup> /s	
-65°F (-54°C) <sup>2</sup>	68500 cSt	68500 mm <sup>2</sup> /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 <sup>2</sup> (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 <sup>2</sup>			ASTM D4684
-40°F (-40°C)	6500 cP	6500 cP	
Brookfield Viscosity <sup>2</sup> (-40°F (-40°C))	7310 cP	7310 cP	ASTM D2983
Cold Cranking Simulator <sup>2</sup> (-22°F (-30°C))	2260 cP	2260 cP	ASTM D5293

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Density Correction Factor <sup>2</sup>	6.28E-4 (g/cm <sup>3</sup> )/°C	6.28E-4 (g/cm <sup>3</sup> )/°C	ASTM D1250
Fire Point, COC <sup>2</sup>	511 °F	266 °C	ASTM D92
Evaporation Loss <sup>2</sup> (302°F (150°C), 22.0 hr)	1.4 wt%	1.4 wt%	ASTM D972
Evaporation Loss <sup>2</sup> (401°F (205°C), 6.5 hr)	10.3 wt%	10.3 wt%	ASTM D972 (mod)
Vapor Pressure <sup>2</sup> (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 <sup>2</sup> (77°F (25°C))	2.11	2.11	ASTM D924
Dielectric Strength <sup>2</sup>	39.4 kV	39.4 kV	ASTM D877
High-Temp. High-Shear Viscosity <sup>2</sup>	2.08 cP	2.08 cP	ASTM D5481

Solubility	Typical Value (English)	Typical Value (SI)	Test Based On
Aniline Point <sup>2</sup>	259.0 °F	126.1 °C	ASTM D611
Kauri-Butanol Value <sup>2</sup>	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.

<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.

<sup>2</sup> Single sample or two sample average determinations

For additional technical, sales and order assistance: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

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