

SpectraSyn™ 100

Polyalphaolefin (PAO) Fluid

Product Description

SpectraSyn™ High Viscosity Polyalphaolefin (PAO) basestocks feature low temperature properties (pour point and viscosity), low volatility, and improved thermal stability. SpectraSyn™ High Viscosity PAO products high viscosity indices translate into improved flow at low temperatures and increased film thickness at high temperatures. SpectraSyn™ High Viscosity PAO basestocks are particularly suited for industrial oils requiring high stability under extreme operating conditions. SpectraSyn™ High Viscosity PAO products are frequently used in conjunction with lower viscosity fluids (PAO, mineral oils) as a viscosity booster to achieve a wide range of ISO VG industrial and automotive gear oils.

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"> ▪ 07/01/2019 		

Basics

	Typical Value (English)	Typical Value (SI)	Test Based On
Specific Gravity (60.1°F (15.6°C))	0.853	0.853	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)	100 cSt	100 mm ² /s	
104°F (40°C)	1240 cSt	1240 mm ² /s	
32°F (0°C) ²	25100 cSt	25100 mm ² /s	
-4°F (-20°C) ²	250000 cSt	250000 mm ² /s	
Viscosity Index	170	170	ASTM D2270
Pour Point	-22 °F	-30 °C	ASTM D5950/D97
Flash Point, COC	541 °F	283 °C	ASTM D92
Water	< 50 ppm	< 50 ppm	ASTM D6304
Refractive Index ² (77°F (25°C))	1.4715	1.4715	ASTM D1218
Total Acid Number	< 0.10 mg KOH/g	< 0.10 mg KOH/g	ASTM D974 (mod)

Flow

	Typical Value (English)	Typical Value (SI)	Test Based On
Brookfield Viscosity ² (-15°F (-26°C))	745000 cP	745000 cP	ASTM D2983
Surface Tension ² (75°F (24°C))	32.5 dyne/cm	32.5 dyne/cm	ASTM D1331A

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Density Correction Factor ²	5.97E-4 (g/cm ³)/°C	5.97E-4 (g/cm ³)/°C	ASTM D1250
Fire Point, COC ²	626 °F	330 °C	ASTM D92
Evaporation Loss ² (302°F (150°C), 22.0 hr)	0.3 wt%	0.3 wt%	ASTM D972
Evaporation Loss ² (401°F (205°C), 6.5 hr)	2.3 wt%	2.3 wt%	ASTM D972 (mod)
Vapor Pressure ² (392°F (200°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))	2.15	2.15	ASTM D924
Dielectric Strength ²	46.5 kV	46.5 kV	ASTM D877

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

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

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