ExxonMobil

SpectraSyn™ 40

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]	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Revision Date	• 08/10/2009		

Basics	Typical Value (English)		Typical Value (SI)		Test Based On
Specific Gravity (60.1°F (15.6°C))	0.850		0.850		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)	39.0	cSt	39.0	mm²/s	
104°F (40°C)	396	cSt	396	mm²/s	
32°F (0°C) [2]	4840	cSt	4840	mm²/s	
-4°F (-20°C) [2]	40500	cSt	40500	mm²/s	
Viscosity Index	147		147		ASTM D2270
Pour Point	-33	°F	-36	°C	ASTM D5950/D97
Flash Point, COC	538	°F	281	°C	ASTM D92
Water	< 50	ppm	< 50	ppm	ASTM D6304
Refractive Index [2] (77°F (25°C))	1.4680		1.4680		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))	102000	cP	102000	cP	ASTM D2983
Surface Tension [2] (75°F (24°C))	31.5	dyne/cm	31.5	dyne/cm	ASTM D1331A

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Density Correction Factor [2]	6.05E-4	(g/cm³)/°C	6.05E-4	(g/cm³)/°C	ASTM D1250
Fire Point, COC [2]	604	°F	318	°C	ASTM D92
Evaporation Loss [2] (302°F (150°C), 22.0 hr)	0.4	wt%	0.4	wt%	ASTM D972
Evaporation Loss [2] (401°F (205°C), 6.5 hr)	2.5	wt%	2.5	wt%	ASTM D972 (mod)
Vapor Pressure [2] (392°F (200°C))	0.9	mm Hg	0.9	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]	38.9	kV	38.9	kV	ASTM D877

Solubility	Typical Value (English)		Typical Value (SI)		Test Based On
Aniline Point [2]	319.3	°F	159.6	°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

Legal Statement

For detailed Product Stewardship information, please contact Customer Service.

ExxonMobil

SpectraSyn™ 40
Polyalphaolefin (PAO) Fluid

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

exxonmobilchemical.com