



## L Series Typical Properties

Property	Method	40	60	100	150	200	300	500	750	1200	2000	2400
	ASTM											
Viscosity, cSt @ 40°C	D445	4.70	9.89	19.64	29.64	38.61	59.85	99	143.47	234.9	369.33	441.70
Viscosity, cSt @ 100°C	D445	1.55	2.40	3.54	4.42	5.04	6.44	8.7	10.35	13.47	18.06	21.92
Viscosity, SUS @ 100°F	D2161	42.3	61.2	104.6	154.8	201.8	315	525	772	1281	2031	2421
Viscosity, SUS @ 210°F	D2161	31.3	34.3	38.3	41.2	43.2	47.9	55.3	61.6	73.8	93.1	110.2
Gravity, API	D4052	27.7	25.6	24.4	23.6	22.8	22.1	21.4	21.2	21.1	21.0	21.0
Gravity, Sp., 15.6°C (60 °F)	D1250	0.8888	0.9007	0.9076	0.9123	0.9170	0.9212	0.9254	0.9267	0.9273	0.9279	0.9279
Weight, Lb./Gal.	D1250	7.401	7.500	7.558	7.597	7.636	7.671	7.707	7.717	7.722	7.727	7.727
Molecular Weight	D2502	NA	240	340	345	340	370	400	420	460	500	540
Viscosity-Gravity Constant	D2501	0.875	0.873	0.873	0.873	0.874	0.871	0.870	0.870	0.861	0.855	0.854
Flash, °C / °F	D92	127 (260)	154 (310)	164 (330)	172 (340)	183 (360)	192 (375)	200 (390)	215 (420)	245 (470)	246 (475)	248 (480)
Color	D1500	L 0.5	L 0.5	L 1.0	L 1.0	L 1.0	L 1.5	L 1.5	L 1.5	L 2.0	L 2.0	L 2.5
Sulfur, % Weight	D4294	<0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10
Pour Point, °C / °F	D97	-72 (-98)	-57 (-70)	-43 (-45)	-37 (-35)	-37 (-35)	-32 (-25)	-25 (-13)	-18 (0)	-12 (+10)	-11 (+10)	-10 (+15)
Aniline Point, °C / °F	D611	61 (142)	67 (153)	74 (165)	77 (171)	79 (174)	81 (178)	83 (181)	85 (185)	90 (194)	98 (208)	99 (210)
UV Absorptivity, 260 nm	D2008	0.1	0.40	2.5	3.0	3.6	3.9	5.5	6.0	6.8	7.0	7.2
Refractive Index @ 20° C	D1747	1.483	1.497	1.498	1.500	1.508	1.515	1.515	1.517	1.517	1.518	1.518
Volatility, % Wt	D972	46.0	15.0	8.0	6.1	5.0	3.0	1.8	1.0	0.4	0.3	0.3
Clay-Gel Analysis, % Wt.	D2007											
Asphaltenes		0	0	0	0	0	0	0	0	0	0	0
Polars		0.05	0.10	0.35	0.5	0.6	0.6	0.90	0.90	2.0	2.9	3.2
Aromatics		27.6	29.9	30.2	32.0	32.4	34.8	40.5	40.6	40.0	40.2	40.4
Saturates		72.35	70.0	69.45	67.5	67.0	64.6	58.6	58.5	58.0	56.9	56.4
Refractivity Intercept	D2159	1.041	1.046	1.043	1.044	1.051	1.051	1.051	1.052	1.054	1.054	1.054
Carbon Type Analysis	D2140											
Ca % Weight		9	15	17	17	17	18	18	18	19	19	19
Cn % Weight		57	44	41	37	36	35	35	34	33	33	28
Cp % Weight		34	41	42	46	47	47	47	48	48	48	53