

## Product Information



# Cross L-Series

*Cross L Series* are severely hydro treated naphthenic process oils manufactured from select crude streams. L Series oil offer low pour point good solvency and color stability. They are ideal for production blending, adhesives, plastics and extended rubber.

### DESCRIPTION

Property	Method	40	60	100	150	200	300	500	750	1200	2000	2400
	<b>ASTM</b>											
Viscosity, cSt @ 40°C	D445	4.70	9.89	19.64	29.64	41.8	59.85	97.8	143.47	234.9	369.33	441.70
Viscosity, cSt @ 100°C	D445	1.55	2.40	3.54	4.42	5.25	6.44	8.29	10.35	13.47	18.06	21.92
Viscosity, SUS @ 100°F	D2161	42.3	61.2	104.6	154.8	218	315.5	522	772	1281	2031	2421
Viscosity, SUS @ 210°F	D2161	31.3	34.3	38.3	41.2	43.9	47.9	54.3	61.6	73.8	93.1	110.2
Gravity, API	D4052	27.7	25.6	24.4	23.6	23.3	22.1	21.4	20.7	21.1	21.0	21.0
Gravity, Sp., 15.6°C (60 °F)	D1250	0.8888	0.9007	0.9076	0.9123	0.9141	0.9212	0.9254	0.9297	0.9273	0.9279	0.9279
Weight, Lb./Gal.	D1250	7.401	7.500	7.558	7.597	7.612	7.671	7.707	7.742	7.722	7.727	7.727
Molecular Weight	D2502	NA	240	340	345	340	370	490	420	460	500	540
Viscosity-Gravity Constant	D2501	0.876	0.877	0.870	0.874	0.874	0.871	0.870	0.871	0.861	0.854	0.853
Flash, °C / °F	D92	124 (255)	154 (310)	163 (325)	172 (340)	181 (360)	188 (370)	200 (390)	215 (420)	235 (455)	246 (475)	248 (480)
Color	D1500	L 0.5	L 0.5	L 1.0	L 1.0	L 1.5	L 1.5	L 1.5	L 1.5	L 2.0	L 2.0	2.5
Sulfur, % Weight	D4294	0.01	0.01	0.04	0.04	0.05	0.06	0.08	0.08	0.08	0.10	0.15
Pour Point, °C / °F	D97	-68 (-90)	-57 (-70)	-46 (-51)	-43 (-45)	-34 (-30)	-32 (-25)	-25 (-13)	-18 (0)	-12 (+10)	-15 (+5)	-10 (+15)
Aniline Point, °C / °F	D611	61 (142)	67 (153)	74 (165)	77 (171)	79 (174)	82 (180)	84 (183)	86 (187)	90 (194)	98 (208)	98 (208)
UV Absorptivity, 260 nm	D2008	0.06	0.40	2.5	3.0	3.6	3.9	5.3	5.8	6.7	6.8	7.2
Refractive Index @ 20° C	D1747	1.483	1.496	1.494	1.498	1.508	1.508	1.510	1.514	1.510	1.510	1.511
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	0.85	2.0	2.9	3.2
Aromatics		27.6	29.9	30.2	32.0	32.4	34.8	40.5	40.55	39.4	40.2	40.4
Saturates		72.35	70.0	69.45	67.5	67.0	64.6	58.6	58.6	58.6	56.9	56.4
Refractivity Intercept	D2159	1.041	1.047	1.040	1.040	1.051	1.047	1.047	1.052	1.046	1.046	1.047
Carbon Type Analysis	D2140											
Ca % Weight		9	16	17	17	17	18	19	19	19	17	19
Cn % Weight		57	42	41	37	36	35	35	34	33	35	28
Cp % Weight		34	42	42	46	47	47	46	47	48	48	53
DMSO Extract, wt.%	IP-346	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

The information on this Product Data Sheet is believed to be accurate and is typical of current production. Specifications are subject to change without notice.

**Health And Safety Information** See separate Material Safety Data Sheets available on request.

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