



## VP Process Oils Typical Properties

VP process oils are premium-quality, fully refined and dewaxed paraffinic base oils. These oils are well suited for a variety of process oils applications. Physical properties are listed below and may vary slightly.

VP		100	165	500	700	150 BS
METHOD	TEST	TYPICAL PROPERTIES				
VISUAL	Appearance	CLEAR AND BRIGHT				
D4052	API Gravity	33.1	30.1	28.7	26.8	24.9
CALC	Lbs/Gallon @ 60°F/15.6°C	7.17	7.30	7.36	7.46	7.45
D445	Viscosity @ 40 °C, cSt	19.7	32.8	91.5	146.4	468.2
	@ 100 °C, cSt	4.0	5.4	10.5	14.0	31.7
	@ 100 °F, SUS	104	157	477	770	2620
D2270	Viscosity Index	97	98	96	91	96
D97	Pour Point, °C	-19	-7	-7	-7	-5
D92	COC Flash Pt, °C	206	219	259	272	306
D1500	ASTM Color	L0.5	L0.5	L1.0	L1.5	L3.0
D4294	Sulfur, Wt. %	0.25	0.38	0.53	0.90	1.10
D972	Evaporation Loss, Wt. % 22hrs. @ 225 °F	1.19	0.58	0.22	0.20	0.06
	3 hours @ 325 °F	-	-	-	-	0.13
D611	Aniline Point, °C	97	96	111	109	118
D664	Total Acid Number	0.005	0.004	0.017	0.013	0.038
D1747	Refractive Index at 20 °C	1.4746	1.4820	1.4853	1.4908	1.4978
D2150	Refractivity Intercept	1.044	1.044	1.044	1.044	1.046
D2501	Visc. Grav. Constant at 210 °F	0.815	0.822	0.814	0.819	0.811
D2502	Average Molecular Weight	360	395	520	540	682
D2140	Carbon Atom Analysis, wt. %					
	Aromatics, Ca	8	10	7	10	12
	Naphthenes, Cn	26	26	24	27	21
	Paraffinics, Cp	66	64	69	63	67
D2007	Clay Gel Analysis					
	Asphaltenes, Wt. %	<0.1	<0.1	<0.1	<0.1	<0.1
	Aromatics, Wt. %	24.9	31.1	28.0	33.7	36.1
	Polar Cpds, Wt. %	0.2	0.3	0.4	0.7	3.2
	Saturates, Wt. %	74.9	68.6	71.6	65.4	60.7

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