

CURLW08X

	Whole crude -200 to 1499	Butane and Lighter -200 to 60	Lt. Naphtha C5- 165F 60 to 165	Hvy Naphtha 165 - 330F	Kerosene 330 - 480F 330 to 480	Diesel 480 - 650F 480 to 650	Vacuum Gas Oil 650 - 1000F 650	Vacuum Residue 1000F+ 1000 to 1499
Cut volume, %	100.0	3.9	17.5	27.4	15.6	13.6	16.6	5.5
API Gravity,	47.4	117.4	82.2	53.6	42.4	34.3	26.8	15.0
Specific Gravity (60/60F),	0.791	0.568	0.662	0.765	0.813	0.853	0.894	0.966
Carbon, wt %	85.8	82.5	83.7	86.0	86.3	86.5	86.5	86.2
Hydrogen, wt %	13.9	17.5	16.3	14.0	13.7	13.3	13.0	12.1
Pour point, F	7.7			(124.2)	(51.6)	28.2	110.7	160.4
Neutralization number (TAN), MG/GM	0.110	0.053	0.058	0.166	0.200	0.091	0.045	0.034
Sulfur, wt%	0.144	0.000	0.001	0.004	0.017	0.135	0.356	0.796
Viscosity at 20C/68F, cSt	2.0	0.4	0.5	0.8	1.8	6.0	76.4	32,629.4
Viscosity at 40C/104F, cSt	1.5	0.3	0.4	0.6	1.3	3.7	29.5	4,075.6
Viscosity at 50C/122F, cSt	1.3	0.3	0.4	0.6	1.2	3.0	20.1	1,761.2
Mercaptan sulfur, ppm	2.0	0.2	0.6	1.0	0.9	0.5	0.1	0.0
Nitrogen, ppm	447.9	-	-	0.0	1.1	51.8	885.7	4,104.2
CCR, wt%	0.9						0.7	10.7
N-Heptane Insolubles (C7 Asphaltenes), wt%	0.0						-	0.1
Nickel, ppm	0.9							13.1
Vanadium, ppm	0.7							10.2
Calcium, ppm	0.5							
Reid Vapor Pressure (RVP) Whole Crude, psi	10.1							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	0.1							
Paraffins, vol %	47.5	100.0	88.3	43.8	40.2	32.7	32.6	4.0
Naphthenes, vol %	31.7	-	11.7	40.3	36.0	44.0	35.9	17.4
Aromatics (FIA), vol %	20.7	-	-	15.8	23.8	23.3	31.5	78.6
Distillation type, TBP								
IBP, F	(8.9)		60.8	165.7	330.6	480.8	651.2	1,001.1
5 vol%, F	70.4		68.4	172.0	336.2	487.6	662.3	1,010.8
10 vol%, F	105.1		75.7	179.0	342.6	495.2	674.9	1,022.1
20 vol%, F	157.9		88.6	193.1	355.7	510.6	701.2	1,046.5
30 vol%, F	209.8		99.8	207.7	369.5	526.3	728.8	1,073.6
40 vol%, F	268.1		110.2	222.7	383.8	542.4	758.0	1,103.9
50 vol%, F	339.9		119.9	238.2	398.7	558.9	788.8	1,138.3
60 vol%, F	433.5		129.2	254.5	414.1	575.9	821.8	1,177.8
70 vol%, F	544.9		138.3	271.7	430.0	593.4	857.6	1,224.7
80 vol%, F	680.7		147.2	289.8	446.3	611.5	897.4	1,282.6
90 vol%, F	867.8		156.1	309.2	463.0	630.4	943.5	1,360.6
95 vol%, F	1,019.1		160.6	319.4	471.4	640.1	970.1	1,414.2
EP, F	1,369.0		164.6	328.9	479.1	649.0	996.8	1,494.7
Freeze point, F				(112.1)	(40.7)	39.5		
Smoke point, mm				26.3	20.3	14.3		
Naphthalenes (D1840), vol%					4.8	7.7		
Viscosity at 100C/212F, cSt	0.7	0.2	0.3	0.4	0.7	1.4	5.3	98.1
Viscosity at 150C/302F, cSt	0.5	0.2	0.2	0.3	0.5	0.9	2.4	19.4
Cetane Index 1990 (D4737),				23.2	40.4	53.2		
Cloud point, F				(119.8)	(46.3)	33.4		
Aniline pt, F					134.5	164.3	200.6	