

SOKOL19Y

	Whole crude	Butane and Lighter IBP - 60F	Lt. Naphtha C5 - 165F	Hvy Naphtha 165 - 330F	Kerosene 330 - 480F	Diesel 480 - 650F	Vacuum Gas Oil 650 - 1000F	Vacuum Residue 1000F+
Cut volume, %	100.0	1.6	5.5	21.6	20.0	20.3	23.9	7.0
API Gravity,	34.8	119.9	81.7	50.6	38.5	31.1	22.3	9.4
Specific Gravity (60/60F),	0.851	0.563	0.664	0.777	0.832	0.870	0.920	1.004
Carbon, wt %	86.5	82.5	84.0	86.3	86.5	87.0	86.9	86.4
Hydrogen, wt %	13.1	17.5	16.0	13.7	13.4	12.8	12.4	11.9
Pour point, F	(13.9)			(144.0)	(77.5)	3.5	89.9	104.6
Neutralization number (TAN), MG/GM	0.190	-	0.001	0.005	0.022	0.213	0.404	0.419
Sulfur, wt%	0.290	0.001	0.013	0.038	0.087	0.200	0.504	1.108
Viscosity at 20C/68F, cSt	3.9	0.5	0.6	1.0	1.9	6.6	228.3	174,589,058.5
Viscosity at 40C/104F, cSt	2.8	0.4	0.5	0.8	1.4	3.9	63.1	1,799,070.1
Viscosity at 50C/122F, cSt	2.4	0.4	0.5	0.7	1.2	3.2	38.0	305,427.7
Mercaptan sulfur, ppm	3.0	0.9	3.0	6.0	5.2	2.3	0.4	0.0
Nitrogen, ppm	1,191.7	-	-	0.1	2.8	87.7	1,539.3	9,279.5
CCR, wt%	1.0						0.3	11.6
N-Heptane Insolubles (C7 Asphaltenes), wt%	0.2						-	2.4
Nickel, ppm	3.3							40.1
Vanadium, ppm	1.3							15.5
Calcium, ppm	0.5							
Reid Vapor Pressure (RVP) Whole Crude, psi	5.1							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	1.3							
Paraffins, vol %	27.6	99.6	78.1	31.2	26.4	25.1	18.4	3.0
Naphthenes, vol %	41.7	-	21.9	49.8	49.6	47.3	39.7	12.6
Aromatics (FIA), vol %	30.6	-	-	19.0	24.1	27.5	41.9	84.4
Distillation type, TBP								
IBP, F	10.1		61.0	166.2	330.7	480.8	651.1	1,001.0
5 vol%, F	138.6		68.8	176.3	337.1	487.8	661.5	1,009.9
10 vol%, F	193.0		72.9	186.6	344.3	495.7	673.4	1,020.1
20 vol%, F	269.1		81.2	205.4	358.9	511.6	698.1	1,042.0
30 vol%, F	339.0		99.7	222.7	373.7	527.7	724.3	1,066.0
40 vol%, F	413.3		110.5	239.0	388.6	544.1	752.3	1,092.8
50 vol%, F	489.9		129.2	254.6	403.7	560.7	782.4	1,123.1
60 vol%, F	570.1		137.6	269.8	418.8	577.6	814.9	1,158.3
70 vol%, F	659.4		145.2	284.8	434.1	594.9	851.1	1,200.9
80 vol%, F	769.5		152.2	299.7	449.3	612.7	892.4	1,255.3
90 vol%, F	928.5		158.9	314.7	464.7	631.0	941.0	1,333.4
95 vol%, F	1,063.2		161.9	322.3	472.3	640.4	968.9	1,391.9
EP, F	1,364.5		164.7	329.2	479.2	649.0	996.7	1,485.1
Freeze point, F				(132.9)	(65.5)	16.0		
Smoke point, mm				21.8	17.7	13.8		
Naphthalenes (D1840), vol%					2.0	8.4		
Viscosity at 100C/212F, cSt	1.3	0.3	0.3	0.4	0.7	1.5	7.0	1,013.7
Viscosity at 150C/302F, cSt	0.9	0.2	0.3	0.3	0.5	0.9	2.7	59.2
Cetane Index 1990 (D4737),				22.1	33.8	46.3		
Cloud point, F				(139.8)	(73.1)	8.4		
Aniline pt, F					118.7	148.5	179.3	