

22777 Springwoods Village Parkway,  
Spring, TX 77389

**KISSJ16X**

	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	1.4	4.1	12.8	13.4	17.6	31.6	19.0
API Gravity,	30.3	124.7	80.5	53.9	41.5	33.4	23.6	10.4
Specific Gravity (60/60F),	0.875	0.552	0.667	0.763	0.818	0.858	0.912	0.997
Carbon, wt %	86.3	82.4	84.0	85.7	86.4	86.5	86.7	86.5
Hydrogen, wt %	13.2	17.6	16.0	14.3	13.6	13.3	12.7	12.4
Pour point, F	(5.8)			(133.2)	(74.6)	(8.0)	86.0	103.7
Neutralization number (TAN), MG/GM	0.506	0.017	0.019	0.135	0.557	0.879	0.690	0.179
Sulfur, wt%	0.364	0.000	0.001	0.006	0.038	0.162	0.425	0.874
Viscosity at 20C/68F, cSt	21.6	0.4	0.5	0.8	1.8	6.8	222.7	8,877,009.4
Viscosity at 40C/104F, cSt	10.7	0.4	0.4	0.7	1.3	4.0	64.7	335,807.6
Viscosity at 50C/122F, cSt	8.1	0.3	0.4	0.6	1.2	3.2	39.7	90,163.8
Mercaptan sulfur, ppm	3.0	0.1	0.3	0.8	1.0	0.7	0.1	0.0
Nitrogen, ppm	2,088.0	-	-	0.5	9.9	90.0	1,303.3	7,561.0
CCR, wt%	4.2						0.2	18.8
N-Heptane Insolubles (C7 Asphaltenes), wt%	0.4						-	1.6
Nickel, ppm	14.6							67.4
Vanadium, ppm	4.5							21.0
Calcium, ppm	0.5							
Reid Vapor Pressure (RVP) Whole Crude, psi	5.4							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	4.2							
Paraffins, vol %	23.8	100.0	78.4	35.3	30.4	26.6	15.9	3.0
Naphthenes, vol %	40.8	-	21.6	54.6	44.3	51.5	44.1	21.8
Aromatics (FIA), vol %	35.4	-	-	10.0	25.3	21.9	40.0	75.2
Distillation type, TBP								
IBP, F	6.6		60.9	166.0	330.8	480.9	651.5	1,001.3
5 vol%, F	155.4		68.5	175.1	337.9	489.0	665.1	1,013.7
10 vol%, F	227.4		73.5	184.7	345.8	497.9	680.2	1,027.7
20 vol%, F	348.6		83.4	202.9	361.5	515.5	710.7	1,057.3
30 vol%, F	461.4		101.5	220.1	377.1	532.7	741.9	1,089.1
40 vol%, F	560.9		110.2	236.7	392.5	549.7	774.0	1,123.8
50 vol%, F	655.7		127.9	252.7	407.7	566.5	807.3	1,162.2
60 vol%, F	753.0		136.1	268.5	422.7	583.3	842.0	1,205.5
70 vol%, F	860.3		143.8	284.0	437.5	599.9	878.3	1,255.3
80 vol%, F	985.4		151.2	299.4	451.9	616.6	916.4	1,314.5
90 vol%, F	1,151.2		158.3	314.8	466.1	633.3	956.8	1,388.2
95 vol%, F	1,275.4		161.6	322.4	473.1	641.6	977.9	1,434.4
EP, F	1,461.5		164.7	329.2	479.3	649.2	997.8	1,503.9
Freeze point, F				(121.4)	(63.1)	4.5		
Smoke point, mm				29.8	20.3	11.4		
Naphthalenes (D1840), vol%					1.8	8.8		
Viscosity at 100C/212F, cSt	2.9	0.3	0.3	0.4	0.7	1.4	7.5	1,017.4
Viscosity at 150C/302F, cSt	1.5	0.2	0.2	0.3	0.5	0.9	2.9	87.2
Cetane Index 1990 (D4737),				27.3	40.1	52.0		
Cloud point, F				(128.8)	(70.5)	(3.3)		
Aniline pt, F					131.5	155.8	187.1	