

22777 Springwoods Village Parkway,
Spring, TX 77389

GLFKB16X

	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	2.3	8.3	21.0	16.5	18.0	24.9	9.0
API Gravity,	39.6	127.8	79.2	54.3	42.5	34.6	26.7	12.3
Specific Gravity (60/60F),	0.827	0.546	0.672	0.761	0.813	0.852	0.895	0.984
Carbon, wt %	86.2	82.2	83.8	85.9	86.1	86.6	86.6	86.6
Hydrogen, wt %	13.6	17.8	16.2	14.1	13.9	13.3	13.1	12.4
Pour point, F	(8.5)			(83.5)	(48.8)	7.6	87.6	82.8
Neutralization number (TAN), MG/GM	0.088	0.006	0.006	0.027	0.074	0.082	0.125	0.203
Sulfur, wt%	0.180	0.000	0.000	0.003	0.015	0.114	0.310	0.678
Viscosity at 20C/68F, cSt	4.2	0.4	0.5	0.8	1.8	6.5	108.5	385,694.7
Viscosity at 40C/104F, cSt	3.0	0.3	0.4	0.6	1.4	3.9	38.4	30,151.9
Viscosity at 50C/122F, cSt	2.6	0.3	0.4	0.6	1.2	3.2	25.4	10,766.7
Mercaptan sulfur, ppm	4.0	0.0	0.3	2.2	3.9	0.7	0.1	0.0
Nitrogen, ppm	526.2	-	-	0.0	0.6	20.1	622.6	3,329.4
CCR, wt%	1.2						0.1	11.2
N-Heptane Insolubles (C7 Asphaltenes), wt%	0.0						-	0.4
Nickel, ppm	0.7							6.6
Vanadium, ppm	0.8							8.0
Calcium, ppm	1.5							
Reid Vapor Pressure (RVP) Whole Crude, psi	6.0							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	0.9							
Paraffins, vol %	36.5	100.0	85.0	42.0	38.3	34.9	25.1	3.4
Naphthenes, vol %	37.7	-	15.0	43.1	44.0	41.5	43.8	20.5
Aromatics (FIA), vol %	25.8	-	-	15.0	17.7	23.5	31.0	76.1
Distillation type, TBP								
IBP, F	(67.0)		61.1	165.9	330.7	480.8	651.3	1,001.1
5 vol%, F	104.7		69.7	173.6	337.3	488.1	662.9	1,010.8
10 vol%, F	159.8		75.2	182.1	344.6	496.2	676.1	1,022.1
20 vol%, F	236.8		85.9	198.7	359.4	512.3	703.2	1,046.2
30 vol%, F	316.1		102.9	214.4	374.3	528.5	731.3	1,072.7
40 vol%, F	405.6		110.7	229.7	389.3	544.8	760.7	1,102.0
50 vol%, F	496.7		128.3	245.0	404.4	561.5	791.9	1,135.3
60 vol%, F	588.3		136.6	260.8	419.6	578.4	825.2	1,173.7
70 vol%, F	690.5		144.1	277.1	434.7	595.8	861.0	1,219.7
80 vol%, F	810.2		151.3	294.1	449.9	613.5	900.8	1,277.4
90 vol%, F	976.3		158.2	311.8	465.0	631.5	946.3	1,356.1
95 vol%, F	1,115.5		161.6	320.9	472.5	640.7	971.9	1,410.9
EP, F	1,403.7		164.7	329.1	479.3	649.1	997.1	1,493.4
Freeze point, F				(71.6)	(38.3)	18.3		
Smoke point, mm				29.3	22.6	15.2		
Naphthalenes (D1840), vol%					2.5	9.0		
Viscosity at 100C/212F, cSt	1.5	0.2	0.3	0.4	0.7	1.5	6.0	309.4
Viscosity at 150C/302F, cSt	1.0	0.2	0.2	0.3	0.5	0.9	2.6	42.5
Cetane Index 1990 (D4737),				26.2	41.5	54.1		
Cloud point, F				(79.5)	(45.0)	12.7		
Aniline pt, F					137.7	163.5	200.4	