

22777 Springwoods Village Parkway,
Spring, TX 77389

GIPSB16Y

	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	2.1	28.4	31.5	12.2	11.7	13.1	1.0
API Gravity,	55.4	117.5	88.0	56.1	43.1	36.4	33.5	8.2
Specific Gravity (60/60F),	0.757	0.568	0.645	0.754	0.810	0.843	0.858	1.013
Carbon, wt %	85.4	82.6	83.6	85.6	86.2	86.4	86.3	86.8
Hydrogen, wt %	14.6	17.4	16.4	14.4	13.8	13.6	13.6	12.0
Pour point, F	(51.7)			(118.7)	(53.1)	28.0	100.3	123.6
Neutralization number (TAN), MG/GM	0.064	0.000	0.005	0.039	0.094	0.127	0.134	0.092
Sulfur, wt%	0.044	0.001	0.004	0.012	0.023	0.053	0.161	0.420
Viscosity at 20C/68F, cSt	1.2	0.6	0.7	1.0	1.9	5.9	69.8	241,779.5
Viscosity at 40C/104F, cSt	0.9	0.5	0.6	0.8	1.4	3.6	26.0	12,934.6
Viscosity at 50C/122F, cSt	0.8	0.4	0.5	0.7	1.3	3.0	17.5	4,134.6
Mercaptan sulfur, ppm	5.0	1.1	3.0	7.1	7.3	3.2	0.7	0.0
Nitrogen, ppm	18.3	-	-	0.0	0.7	10.5	80.7	372.6
CCR, wt%	0.1						0.2	8.0
N-Heptane Insolubles (C7 Asphaltenes), wt%	0.0						-	2.4
Nickel, ppm	0.1							4.3
Vanadium, ppm	0.0							2.5
Calcium, ppm	6.3							
Reid Vapor Pressure (RVP) Whole Crude, psi	8.3							
Hydrogen Sulfide (dissolved), ppm	-							
Salt content, ptb	0.2							
Paraffins, vol %	60.2	100.0	92.8	42.6	51.7	41.0	51.6	4.2
Naphthenes, vol %	28.3	-	7.2	47.3	23.1	42.0	28.3	19.7
Aromatics (FIA), vol %	11.5	-	-	10.0	25.2	17.0	20.1	76.0
Distillation type, TBP								
IBP, F	14.0		62.9	165.6	330.5	480.8	651.0	1,000.4
5 vol%, F	73.0		70.0	171.1	335.4	488.5	660.1	1,004.5
10 vol%, F	82.8		72.8	177.6	341.0	496.9	670.4	1,009.4
20 vol%, F	128.0		78.4	191.5	353.0	513.8	691.7	1,019.6
30 vol%, F	163.2		84.0	205.5	366.0	530.6	714.1	1,031.0
40 vol%, F	205.6		99.8	219.7	380.0	547.4	737.9	1,044.0
50 vol%, F	252.8		107.3	234.4	395.0	564.2	763.7	1,058.7
60 vol%, F	313.6		124.7	249.9	410.9	581.0	792.3	1,076.4
70 vol%, F	419.1		135.3	266.5	427.6	597.9	824.9	1,098.4
80 vol%, F	562.6		145.3	284.8	444.8	615.0	864.2	1,128.0
90 vol%, F	716.3		155.0	305.6	462.3	632.3	915.8	1,175.3
95 vol%, F	821.9		159.9	317.2	471.1	641.1	950.8	1,219.4
EP, F	1,055.4		164.5	328.6	479.1	649.1	994.0	1,345.8
Freeze point, F				(106.8)	(41.3)	40.4		
Smoke point, mm				31.8	23.8	14.5		
Naphthalenes (D1840), vol%					1.4	7.1		
Viscosity at 100C/212F, cSt	0.5	0.3	0.4	0.5	0.7	1.4	4.5	101.6
Viscosity at 150C/302F, cSt	0.3	0.3	0.3	0.3	0.5	0.9	2.0	15.3
Cetane Index 1990 (D4737),				26.6	41.1	58.7		
Cloud point, F				(114.3)	(48.6)	33.0		
Aniline pt, F					138.7	174.1	212.8	