

ASGBL16B

	Butane and Lighter	Butane Lt. Naphtha	Hvy Naphtha	Kerosene	Diesel	Vacuum Gas Oil	Vacuum Residue	
Whole crude	IBP - 60F	C5 - 165F	330F	480F	650F	1000F	1000F+	
Cut volume, %	100.0	4.8	17.5	36.0	17.0	12.5	10.4	1.9
API Gravity,	52.5	115.9	84.8	54.5	44.4	35.8	28.3	15.0
Specific Gravity (60/60F),	0.769	0.572	0.654	0.761	0.804	0.846	0.885	0.966
Carbon, wt %	85.7	82.6	83.7	86.1	86.0	86.3	86.3	86.5
Hydrogen, wt %	14.2	17.4	16.3	13.9	14.0	13.5	13.1	12.6
Pour point, F	(85.1)			(122.5)	(60.6)	13.2	95.3	105.4
Neutralization number (TAN), MG/GM	0.020	0.000	0.001	0.005	0.040	0.035	0.042	0.066
Sulfur, wt%	0.113	0.000	0.000	0.001	0.010	0.176	0.493	1.143
Viscosity at 20C/68F, cSt	1.4	0.4	0.5	0.7	1.7	5.9	64.4	50,687.6
Viscosity at 40C/104F, cSt	1.0	0.3	0.4	0.6	1.3	3.6	25.5	5,865.8
Viscosity at 50C/122F, cSt	0.9	0.3	0.4	0.5	1.1	3.0	17.6	2,455.8
Mercaptan sulfur, ppm	3.0	0.1	0.2	0.4	1.3	0.9	0.1	0.0
Nitrogen, ppm	177.3	-	-	116.2	51.7	54.6	551.2	2,206.4
CCR, wt%	0.4						0.1	15.4
N-Heptane Insolubles (C7 Asphaltenes), wt%	0.0						-	0.9
Nickel, ppm	0.1							4.2
Vanadium, ppm	0.8							31.5
Calcium, ppm	NotAvailable							
Reid Vapor Pressure (RVP) Whole Crude, psi	10.5							
Hydrogen Sulfide (dissolved), ppm	NotAvailable							
Salt content, ptb	8.1							
Paraffins, vol %	53.9	100.0	88.0	45.4	46.6	39.7	37.7	8.4
Naphthenes, vol %	30.5	-	12.0	36.9	34.5	43.3	35.9	23.4
Aromatics (FIA), vol %	15.6	-	-	17.7	18.9	17.1	26.4	68.2
Distillation type, TBP								
IBP, F	(0.7)		60.7	165.7	330.6	480.7	650.9	1,000.8
5 vol%, F	61.6		67.3	172.0	336.0	486.9	659.5	1,008.1
10 vol%, F	98.8		73.2	179.0	342.1	493.9	669.4	1,016.6
20 vol%, F	155.8		84.3	193.0	354.7	508.4	690.3	1,034.8
30 vol%, F	195.1		99.1	207.0	368.0	523.3	713.2	1,055.0
40 vol%, F	234.4		108.3	221.1	381.8	538.8	738.2	1,077.6
50 vol%, F	278.5		122.5	235.5	396.3	554.9	766.0	1,103.6
60 vol%, F	342.5		133.0	250.1	411.5	571.7	797.1	1,134.2
70 vol%, F	426.0		142.3	265.6	427.5	589.5	832.9	1,171.9
80 vol%, F	535.6		150.6	284.2	444.2	608.3	875.6	1,221.6
90 vol%, F	694.8		158.0	306.1	461.7	628.4	928.6	1,297.8
95 vol%, F	834.1		161.5	317.8	470.7	639.0	961.2	1,361.0
EP, F	1,189.9		164.7	328.7	479.1	648.9	995.7	1,473.3
Freeze point, F				(110.7)	(49.1)	25.2		
Smoke point, mm				27.3	21.2	15.4		
Naphthalenes (D1840), vol%					2.1	8.4		
Viscosity at 100C/212F, cSt	0.5	0.2	0.3	0.4	0.7	1.4	4.8	122.3
Viscosity at 150C/302F, cSt	0.4	0.2	0.2	0.3	0.5	0.9	2.2	22.7
Cetane Index 1990 (D4737),				24.1	43.9	56.3		
Cloud point, F				(118.1)	(55.7)	18.8		
Aniline pt, F					136.5	165.8	202.3	