

	Crude			LAPA			TBP DISTILLATION						
	Country			Brazil									
Density at 15°C, kg/m3	916.9	Assay Date			08-Oct-18			°C	wt%	vol%	°C	wt%	vol%
°API	22.7	080	2.1	3.0	520	52.9	57.0						
Bbl/mt	6.870	090	2.5	3.5	540	55.9	59.8						
Acidity, mg KOH/g	0.44	100	3.1	4.2	560	58.9	62.7						
Sulphur, wt%	0.57	120	4.5	6.0	580	62.0	65.6						
Hydrogen Sulphide, mg/kg	0	140	6.3	8.2									
Mercaptan Sulphur, mg/kg	36	160	8.1	10.3									
Viscosity, cSt at 10 °C	5560.0	180	9.6	12.1									
50 °C	52.9	200	10.9	13.6									
Pour Point, °C	12	220	12.8	15.7									
Total Nitrogen, wt%	0.56	240	15.6	18.9									
Wax, wt%	-	260	18.8	22.3									
Wax Appearance Temperature, °C	-	280	21.6	25.4									
RVP at 37.8 °C, kPa	13	300	24.1	28.0									
Water, vol%	-	320	26.3	30.3									
NaCl, mg/kg	86.7	340	28.7	32.9									
Nickel, mg/kg	24.9	360	32.5	36.8									
Vanadium, mg/kg	20.0	380	36.5	40.9									
Chlorides, mg/kg	39.5	400	39.0	43.3									
Calcium (Ca2+)	3.0	420	41.0	45.3									
Sodium (Na+)	4.2	440	43.0	47.3									
Iron, mg/kg	-	460	45.1	49.4									
Mercury, µg/kg	-	480	47.5	51.8									
		500	50.1	54.3									

PROPERTIES OF TBP CUTS																
LIGHT NAPHTHA	Cuts	Yield	Yield	Den 15°C	S	RSH	RON	MON			Napht.	Aro.	RVP			
	°C	wt%	vol %	kg/m3	wt%	mg/kg	clear	clear			vol%	vol%	kPa			
	15-65	1.2	1.6	648	0.02	2	72.8	71.1			8.4	0.4	-			
	15-80	1.7	2.3	662	0.02	4	70.1	68.2			15.8	1.2	-			
HEAVY NAPHTHA	Cuts	Yield	Yield	Den 15°C	S	RSH					Napht.	Aro.				
	°C	wt%	vol %	kg/m3	wt%	mg/kg					vol%	vol%				
	80-150	5.2	6.3	745	0.03	17					43.2	5.8				
	80-175	7.2	8.8	755	0.04	18					42.7	7.1				
	100-150	4.1	5.0	752	0.04	18					43.6	6.2				
KEROSENE	Cuts	Yield	Yield	Den 15°C	S	RSH	Smoke	Acidity	Cetane	Freez. Pt		Aro.	Visc cSt			Flash
	°C	wt%	vol %	kg/m3	wt%	mg/kg	Pt mm	mgKOH/g	Index	°C		vol%	50°C			Point
	150-230	6.9	7.9	800	0.08	19	22	0.18	42.1	-56		12.8	1.0			56.9
	175-230	4.8	5.4	809	0.09	19	23	0.22	43.2	-49		13.8	1.1			71.7
	150-250	10.0	11.3	809	0.09	19	22	0.23	44.8	-48		14.4	1.1			62.0
GASOIL	Cuts	Yield	Yield	Den 15°C	S		Anilin		Cetane	Cloud Pt	CFPP	Pour Pt	Visc cSt	Visc cSt	UOPK	Flash
	°C	wt%	vol %	kg/m3	wt%		Point °C		Index	C	C	C	50°C	100°C		Point
	175-400	29.7	31.6	859	0.26		67		48.6	2	-1	-5	3.2	1.5	11.7	90.5
	230-400	24.9	26.2	869	0.30		69		50.1	3	3	2	4.2	1.8	11.7	106.3
	230-375	21.6	22.9	864	0.28		68		50.3	-1	-2	-2	3.6	1.6	11.7	104.6
VACUUM DISTILLATE	Cuts	Yield	Yield	Den 15°C	S	Conrad.	Anilin	Ni	Va	Total N	Bas N	Pour Pt	Visc cSt	Visc cSt	UOPK	Asp C7
	°C	wt%	vol %	kg/m3	wt%	wt%	Point °C	mg/kg	mg/kg	wt%	mg/kg	C	100°C	150°C		wt %
	375-550	21.7	21.2	935	0.54	0.3	82	0	0	0.33	952	38	14.3	5.9	11.8	0.1
	375-565	24.0	23.4	937	0.56	0.4	83	0	0	0.35	1020	39	15.8	6.5	11.8	0.1
	375-580	26.3	25.6	940	0.57	0.6	83	1	1	0.37	1100	40	17.4	7.2	11.8	0.2
	400-580	23.0	22.3	944	0.60	0.7	84	1	1	0.40	1200	42	21.7	8.7	11.8	0.2
RESIDUE	Cuts	Yield	Yield	Den 15°C	S	Conrad.	Acidity	Ni	Va	Total N		Pour Pt	Visc cSt	Visc cSt	Pene	Asp C7
	°C	wt%	vol %	kg/m3	wt%	wt%	mgKOH/g	mg/kg	mg/kg	wt%		C	100°C	150°C	mm/10	wt%
	> 375	64.3	60.0	981	0.78	11.0	0.1	39	31	0.86		42	163	56	-	3.7
	> 550	42.6	38.7	1007	0.90	16.4	0.0	58	47	1.13		57	1120	363	102	5.6
	> 565	40.3	36.6	1010	0.91	17.3	0.0	61	49	1.16		58	1420	455	88	5.8

	> 580	38.0	34.4	1013	0.92	18.2	0.0	65	52	1.20		59	1840	579	77	6.2
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TOTAL DTS / AM

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