



Crude **ATAPU**

Country **Brazil**

TBP  
DISTILLATION

		Assay Date	27-Apr-21	°C	wt%	vol%	°C	wt%	vol%
				Density at 15°C, kg/m3	885.1	080	4.3	6.0	520
°API	28.3	090	5.0	6.9	540	68.9	72.4		
Bbl/mt	7.119	100	5.9	8.0	560	71.8	75.1		
Acidity, mg KOH/g	0.24	120	8.1	10.6	580	74.6	77.6		
Sulphur, wt%	0.37	140	10.6	13.6					
Hydrogen Sulphide, mg/kg	0	160	13.2	16.5					
Mercaptan Sulphur, mg/kg	35	180	15.5	19.1					
Viscosity, cSt at 10 °C	81.6	200	17.8	21.6					
50 °C	14.3	220	20.2	24.2					
Pour Point, °C	-18	240	22.7	27.0					
Total Nitrogen, wt%	0.26	260	25.5	29.9					
Basic Nitrogen, wt%	0.13	280	28.5	33.0					
Wax, wt%	-	300	31.5	36.1					
Wax Appearance Temperature, °C	-	320	34.6	39.3					
RVP at 37.8 °C, kPa	-	340	37.8	42.5					
Water, vol%	-	360	40.9	45.6					
NaCl, mg/kg	3.0	380	44.1	48.8					
Nickel, mg/kg	10.9	400	47.3	51.9					
Vanadium, mg/kg	12.8	420	50.4	54.9					
Iron, mg/kg	6.2	440	53.6	58.0					
Mercury, µg/kg	-	460	56.7	61.0					
Calcium, mg/kg	<1	480	59.8	63.9					
Silicium, mg/kg	<3	500	62.9	66.8					
Zinc, mg/kg	6.5								

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			
LIGHT NAPHTHA	15-65	2.3	3.1	648	0.02	7	70.4	69.2			7.5	0.5	-			
	15-80	3.2	4.2	662	0.02	16	67.4	65.8			14.2	1.4	-			
HEAVY NAPHTHA	80-150	7.6	9.0	745	0.03	57					49.4	7.1				
	80-175	10.6	12.5	755	0.03	57					50.0	8.4				
	100-150	6.0	7.0	753	0.03	58					51.3	7.6				
KEROSENE	150-230	9.5	10.5	801	0.08	45	24	0.08	40.1	-53		15.1	1.0			55.9
	175-230	6.5	7.1	810	0.09	40	24	0.09	41.2	-48		16.6	1.2			69.4
	150-250	12.2	13.4	807	0.09	41	24	0.09	41.9	-48		16.2	1.1			59.2
GASOIL	175-400	32.3	33.4	855	0.20		67		48.7	-2	-5	-9	3.2	1.4	11.8	84.4
	230-400	25.8	26.3	868	0.23		69		51.0	1	0	-1	4.5	1.8	11.8	107.7
	230-375	21.9	22.4	861	0.21		68		51.3	-4	-5	-6	3.7	1.6	11.8	105.7
VACUUM DISTILLATE	375-550	27.1	25.8	929	0.40	0.2	83	0	0	0.25	953	38	12.0	4.0	11.8	0.0
	375-565	29.2	27.7	931	0.41	0.4	83	0	0	0.26	1020	39	13.2	4.3	11.8	0.0
	375-580	31.3	29.6	933	0.42	0.5	83	1	1	0.27	1090	40	14.5	4.6	11.8	0.1
	400-580	27.3	25.7	938	0.43	0.6	85	1	1	0.29	1200	42	18.0	5.4	11.8	0.1
RESIDUE	> 375	56.7	52.0	964	0.56	7.6	0.2	19	23	0.44		30	93	17	-	1.4
	> 550	29.6	26.2	998	0.70	14.2	0.2	37	43	0.61		62	2210	149	64	2.6
	> 565	27.5	24.3	1001	0.72	15.2	0.2	39	46	0.63		64	3270	194	53	2.8
	> 580	25.4	22.4	1004	0.73	16.2	0.2	42	49	0.64		65	5010	258	46	3.0