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## Processo Agroindustrial de Processamento de Cacau

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1 Segmentação da Marca

## ANEXO A – Propriedades na Saturação - REFRIGERANTE R-717 (AMÔNIA)

TEMP.	PRES.	VÓLUME ESPECÍFICO		ENTALPIA ESPECÍFICA			ENTROPIA ESPECÍFICA		TEM P
°C	kgf/cm <sup>2</sup>	Líquido m³/kg v <sub>L</sub> x10 ³	Vapor m³/kg v <sub>v</sub>	Liquido kcal/kg h <sub>L</sub>	Liq-vap kcal/kg h <sub>LV</sub>	Vapor kcal/kg h <sub>v</sub>	Líquido kcal/kg.K S <sub>L</sub>	Vapor kcal/kg.K S <sub>V</sub>	°C
-70,0	0,112	1,3788	9,0090	25,90	349,80	375,70	0,6878	2,4101	-70,0
-65,0	0,159	1,3898	6,4518	31,00	346,85	377,85	0,7124	2,3794	-65,0
-60,0	0,223	1,4010	4,7026	35,63	344,75	380,38	0,7347	2,3525	-60,0
-55,0	0,309	1,4126	3,4866	40,89	341,59	382,48	0,7591	2,3253	-55,0
-50,0	0,416	1,4245	2,6253	46,16	338,38	384,54	0,7830	2,2997	-50,0
-45,0	0,556	1,4367	2,0053	51,44	335,11	386,55	0,8064	2,2755	-45,0
-40,0	0,732	1,4493	1,5521	56,75	331,76	388,51	0,8293	2,2526	-40,0
-35,0	0,951	1,4623	1,2160	62,07	328,33	390,40	0,8519	2,2309	-35,0
-30,0	1,219	1,4757	0,9635	67,41	324,82	392,23	0,8741	2,2102	-30,0
-28,0	1,342	1,4811	0,8805	69,56	323,39	392,95	0,8828	2,2022	-28,0
-26,0	1,475	1,4867	0,8059	71,70	321,94	393,64	0,8915	2,1944	-26,0
-24,0	1,619	1,4923	0,7388	73,86	320,47	394,33	0,9002	2,1867	-24,0
-22,0	1,774	1,4980	0,6783	76,01	318,99	395,00	0,9088	2,1792	-22,0
-20,0	1,940	1,5037	0,6237	78,17	317,50	395,67	0,9173	2,1717	-20,0
-18,0	2,117	1,5096	0,5743	80,33	315,98	396,31	0,9258	2,1645	-18,0
-16,0	2,300	1,5155	0,5295	82,50	314,45	396,95	0,9342	2,1573	-16,0
-14,0	2,514	1,5215	0,4889	84,67	312,90	397,57	0,9426	2,1503	-14,0
-12,0	2,732	1,5276	0,4521	86,85	311,33	398,18	0,9510	2,1433	-12,0
-10,0	2,966	1,5337	0,4185	89,03	309,74	398,77	0,9592	2,1365	-10,0
-8,0 -6,0 -4,0 -2,0	3,216 3,481 3,761 4,060 4,379	1,5400 1,5464 1,5528 1,5594 1,5660	0,3878 0,3599 0,3343 0,3110 0,2895	91,21 93,40 95,60 97,80 100,00	308,13 306,51 304,86 303,19 301,51	399,34 399,91 400,46 400,99 401,51	0,9675 0,9757 0,9838 0,9919 1,0000	2,1298 2,1232 2,1167 2,1103 2,1040	-8,0 -6,0 -4,0 -2,0
5,0	5,259	1,5831	0,2433	105,54	297,20	402,74	1,0200	2,0886	5,0
10,0	6,271	1,6008	0,2056	111,12	292,75	403,87	1,0397	2,0738	10,0
15,0	7,427	1,6193	0,1748	116,73	288,16	404,89	1,0592	2,0594	15,0
20,0	8,741	1,6386	0,1494	122,40	283,42	405,82	1,0785	2,0455	20,0
25,0	10,225	1,6588	0,1283	128,11	278,53	406,64	1,0977	2,0320	25,0
30,0	11,895	1,6800	0,1106	133,87	273,48	407,35	1,1166	2,0189	30,0
32,0	12,617	1,6888	0,1044	136,18	271,42	407,60	1,1241	2,0138	32,0
34,0	13,274	1,6977	0,0986	138,51	269,32	407,83	1,1316	2,0086	34,0
36,0	14,165	1,7068	0,0931	140,84	267,19	408,03	1,1391	2,0035	36,0
38,0	14,990	1,7161	0,0880	143,18	265,04	408,22	1,1465	1,9985	38,0
40,0	15,850	1,7257	0,0833	145,53	262,85	408,38	1,1539	1,9934	40,0
42,0	16,742	1,7354	0,0788	147,89	260,62	408,51	1,1613	1,9884	42,0
44,0	17,682	1,7454	0,0746	150,26	258,35	408,61	1,1687	1,9835	44,0
46,0	18,658	1,7555	0,0706	152,64	256,05	408,69	1,1761	1,9785	46,0
48,0	19,673	1,7659	0,0670	155,04	253,69	408,73	1,1834	1,9735	48,0
50,0	20,727	1,7766	0,0635	157,46	251,28	408,74	1,1908	1,9685	50,0
55,0	23,553	1,8044	0,0556	163,63	244,92	408,55	1,2094	1,9559	55,0
60,0	26,657	1,8341	0,0487	170,09	237,95	408,04	1,2285	1,9429	60,0
65,0	30,059	1,8658	0,0428	177,10	229,98	407,08	1,2490	1,9292	65,0

## ANEXO B – Diagrama p-h -REFRIGERANTE R-717 (AMÔNIA)

