

TABELA DE EMBALAGEM DE TUBOS QUADRADO

ESPESSURA DO TUBO (mm)

		0.75	0.80	0.90	0.95	1.06	1.11	1.20	1.25	1.50	1.55	1.90	1.95	2.00	2.25	2.65	2.70	3.00	3.35	3.75	4.25	4.75	
15 X 15	TOTAL BARRAS	300	300	270	270	270	270	270	270	270	270												
	PESO MÉDIO KG	2.03	2.16	2.42	2.54	2.82	2.95	3.17	3.29	3.90	4.01												
20 X 20	TOTAL BARRAS	304	304	270	270	270	270	270	270	198	198	160	160	160	160								
	PESO MÉDIO KG	2.74	2.91	3.26	3.44	3.82	3.99	4.30	4.47	5.30	5.47	6.61	6.77	6.92	7.71								
25 X 25	TOTAL BARRAS	256	256	256	256	225	196	196	196	156	156	121	110	110	110	90	90						
	PESO MÉDIO KG	3.44	3.66	4.11	4.33	4.81	5.03	5.42	5.64	6.71	6.93	8.39	8.60	8.80	9.82	11.41	11.61						
30 x 30	TOTAL BARRAS	224	224	224	224	195	168	168	168	132	132	108	108	108	90	80	80	72					
	PESO MÉDIO KG	4.14	4.42	4.95	5.22	5.81	6.08	6.55	6.82	8.12	8.38	10.18	10.43	10.68	11.94	13.90	14.14	15.58					
35 x 35	TOTAL BARRAS		224	224	224	195	168	168	168	132	132	108											
	PESO MÉDIO KG		5.17	5.80	6.11	6.81	7.12	7.68	7.99	9.53	9.84	11.96											
40 x 40	TOTAL BARRAS		110	110	110	110	110	110	110	99	99	80	80	72	72	56	56	56					
	PESO MÉDIO KG		5.92	6.65	7.01	7.80	8.16	8.81	9.16	10.94	11.30	13.75	14.10	14.44	16.16	18.88	19.22	21.22					
50 x 50	TOTAL BARRAS			90	90	90	90	90	90	72	72	63	63	56	56	48	42	42					
	PESO MÉDIO KG			8.34	8.79	9.79	10.25	11.06	11.51	13.76	14.21	17.32	17.76	18.20	20.39	23.86	24.29	26.86					
60 x 60	TOTAL BARRAS			49	49	49	49	49	49	36	36	36	36	36	36	36	36	36	30	30	30	30	
	PESO MÉDIO KG			10.03	10.58	11.79	12.33	13.32	13.86	16.58	17.12	20.89	21.42	21.96	24.62	28.84	29.36	32.49	36.11	40.20	45.25	50.22	
70 x 70	TOTAL BARRAS									30	30	30	30	30	30	30	30	30	25	25	25	25	
	PESO MÉDIO KG									19.40	20.03	24.46	25.09	25.72	28.85	33.82	34.44	38.13	42.41	47.25	53.23	59.15	
80 x 80	TOTAL BARRAS									25	25	25	25	25	25	25	25	25	20	20	20	20	
	PESO MÉDIO KG									22.22	22.95	28.03	28.75	29.48	33.08	38.80	39.51	43.77	48.70	54.30	61.22	68.07	
90 x 90	TOTAL BARRAS									20	20	20	20	20	20	20	20	20	16	16	16	16	
	PESO MÉDIO KG									25.04	25.86	31.60	32.42	33.23	37.30	43.78	44.59	49.41	55.00	61.34	69.21	77.00	
100 x 100	TOTAL BARRAS									16	16	16	16	16	16	16	16	16	16	16	16	16	
	PESO MÉDIO KG									27.86	28.77	35.17	36.08	36.99	41.53	48.76	49.66	55.04	61.29	68.39	77.19	85.92	

NOTA:

TABELA DE EMBALAGEM DE TUBOS REDONDO

ESPESSURA DO TUBO (mm)

REDONDO (mm)	0.75	0.80	0.90	0.95	1.08	1.11	1.20	1.25	1.50	1.55	1.90	1.95	2.00	2.25	2.65	2.70	3.00	3.35	3.75	4.25	4.75	
15.87	TOTAL BARRAS	547	547	547	469	469	469	397	397	331	331	271	271	271								
	PESO MÉDIO KG	1.68	1.78	1.99	2.10	2.32	2.42	2.60	2.70	3.19	3.28	3.93	4.02	4.10								
19.05	TOTAL BARRAS	469	469	469	397	397	397	331	331	271	271	217	217	217	217							
	PESO MÉDIO KG	2.03	2.16	2.42	2.54	2.82	2.95	3.17	3.29	3.90	4.01	4.82	4.93	5.05	5.59							
21.30	TOTAL BARRAS	397	397	397	331	331	331	271	271	217	217	169	169	169	169	169						
	PESO MÉDIO KG	2.28	2.43	2.72	2.86	3.17	3.32	3.57	3.71	4.39	4.53	5.45	5.58	5.71	6.34	7.31						
22.22	TOTAL BARRAS	397	397	331	331	271	271	271	271	217	217	169	169	169	127	127						
	PESO MÉDIO KG	2.38	2.54	2.84	2.99	3.32	3.47	3.73	3.88	4.60	4.74	5.71	5.85	5.98	6.65	7.67						
25.40	TOTAL BARRAS	331	331	331	331	271	271	217	217	217	169	169	169	127	127		91					
	PESO MÉDIO KG	2.74	2.91	3.26	3.44	3.82	3.99	4.30	4.47	5.30	5.47	6.61	6.77	6.92	7.71	8.92	9.94					
26.70	TOTAL BARRAS	331	331	271	271	217	217	217	217	169	169	127	127	127	127	127	127	127				
	PESO MÉDIO KG	2.88	3.07	3.44	3.62	4.02	4.20	4.53	4.71	5.59	5.77	6.97	7.14	7.31	8.14	9.43	9.59	10.52				
28.60	TOTAL BARRAS	271	271	271	271	217	217	217	217	169	169	127	127	127								
	PESO MÉDIO KG	3.09	3.29	3.69	3.89	4.32	4.52	4.87	5.08	6.01	6.20	7.51	7.89	7.87								
31.75	TOTAL BARRAS	169	169	169	169	169	169	169	169	169	127	127	127	91	91	91	91					
	PESO MÉDIO KG	3.44	3.66	4.11	4.33	4.81	5.03	5.42	5.64	6.71	6.93	8.39	8.60	8.80	9.82	11.41	11.61	12.76				
33.70	TOTAL BARRAS			217	217	217	217	169	169	127	127	91	91	91	91	91	91	91	91	91		
	PESO MÉDIO KG			4.37	4.60	5.12	5.35	5.77	6.00	7.15	7.37	8.94	9.16	9.38	10.47	12.18	12.39	13.63	15.04	16.62		
34.92	TOTAL BARRAS		217	217	217	169	169	169	169	127	127	91	91	91	91	91	91	91	91	91	91	
	PESO MÉDIO KG		4.04	4.53	4.78	5.31	5.55	5.99	6.23	7.42	7.65	9.28	9.51	9.74	10.88	12.65	12.87	14.17	15.65	17.30		
38.10	TOTAL BARRAS	169	169	169	169	169	169	169	169	127	127	91	91	91	91	61	61	61				
	PESO MÉDIO KG	4.14	4.42	4.95	5.22	5.81	6.08	6.55	6.82	8.12	8.38	10.18	10.43	10.68	11.94	13.90	14.14	15.58				
41.27	TOTAL BARRAS		169	169	169	169	169	127	127	127	127	91	91	91	91							
	PESO MÉDIO KG		4.79	5.38	5.67	6.31	6.60	7.11	7.40	8.83	9.11	11.07	11.35	11.62	12.99							
42.40	TOTAL BARRAS		127	127	127	127	127	127	127	127	127	91	91	91	91	61	61	61	61	61		
	PESO MÉDIO KG		4.92	5.53	5.83	6.48	6.78	7.32	7.61	9.08	9.37	11.39	11.67	11.96	13.37	15.59	15.86	17.49	19.36	21.45		
44.45	TOTAL BARRAS			102	102	102	102	102	102	102	102	61	61	61	61	61	61	61				
	PESO MÉDIO KG			5.87	6.19	6.89	7.21	7.78	8.09	9.65	9.97	12.12	12.42	12.73	14.23	16.61	16.90	18.64				
47.60	TOTAL BARRAS		127	127	127	127	127	127	91	91	91	91	61	61								
	PESO MÉDIO KG		5.54	6.22	6.56	7.30	7.64	8.24	8.57	10.23	10.56	12.85	13.17	13.49	15.10							
48.30	TOTAL BARRAS			127	127	127	127	127	91	91	91	91	91	61	61	61	61	61	61			
	PESO MÉDIO KG			6.31	6.66	7.41	7.75	8.36	8.70	10.39	10.72	13.04	13.37	13.70	15.33	17.90	18.22	20.11	22.28	24.72		
50.80	TOTAL BARRAS			70	70	70	70	70	70	70	70	70	70	61	61	61	61	37	37	37		
	PESO MÉDIO KG			6.65	7.01	7.80	8.16	8.81	9.16	10.94	11.30	13.75	14.10	14.44	16.16	18.88	19.22	21.22	23.52	26.11		
57.15	TOTAL BARRAS			91	91	91	91	91	91	91	91	61	61	61	61	61	37	37	37	37		
	PESO MÉDIO KG			7.49	7.90	8.80	9.20	9.93	10.34	12.35	12.75	15.53	15.93	16.32	18.28	21.37	21.75	24.04	26.67	29.63		
60.30	TOTAL BARRAS			61	61	61	61	61	61	61	61	61	61	61	61	37	37	37	37	37		
	PESO MÉDIO KG			7.91	8.34	9.29	9.72	10.49	10.92	13.05	13.47	16.42	16.84	17.25	19.33	22.61	23.01	25.44	28.23	31.38		
63.50	TOTAL BARRAS			61	61	61	61	61	61	61	61	61	61	61	61	37	37	37	37	37		
	PESO MÉDIO KG			8.34	8.79	9.79	10.25	11.06	11.51	13.76	14.21	17.32	17.76	18.20	20.39	23.86	24.29	26.86	29.82	33.15		
76.20	TOTAL BARRAS			37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
	PESO MÉDIO KG			10.03	10.58	11.79	12.33	13.32	13.86	16.58	17.12	20.89	21.42	21.96	24.62	28.84	29.36	32.49	36.11	40.20	45.25	50.22
82.55	TOTAL BARRAS							24	24	24	24	24	24	24	24	24	24	24	24	24		
	PESO MÉDIO KG							14.44	15.04	17.99	18.58	22.67	23.26	23.84	26.73	31.33	31.90	35.31	39.26			
88.90	TOTAL BARRAS							37	37	37	37	37	37	37	37	24	24	24	24	24	24	24
	PESO MÉDIO KG							15.57	16.21	19.40	20.03	24.46	25.09	25.72	28.85	33.82	34.44	38.13	42.41	47.25	53.23	59.14
95.25	TOTAL BARRAS									24	24	24	24	24	24	24	24	24	24	24	24	24
	PESO MÉDIO KG									20.81	21.49	26.24	26.92	27.60	30.96	36.31	36.97	40.95	45.55	50.77	57.23	63.61
101.60	TOTAL BARRAS									24	24	24	24	24	24	24	24	24	24	24	24	24
	PESO MÉDIO KG									22.22	22.95	28.03	28.75	29.48	33.08	38.80	39.51	43.77	48.70	54.29	61.22	68.07
114.30	TOTAL BARRAS									19	19	19	19	19	19	19	19	19	19	19	19	19
	PESO MÉDIO KG									25.04	25.86	31.60	32.42	33.23	37.30	43.78	44.59	49.41	55.00	61.34	69.21	77.00
127.00	TOTAL BARRAS									19	19	19	19	19	19	19	19	19	19	19	19	19
	PESO MÉDIO KG									27.85	28.77	35.17	36.08	36.99	41.53	48.76	49.66	55.04	61.29	68.39	77.19	85.92

NOTA: Peso teórico calculado para barras com 6 m. Itens indicados com (*) sob consulta.

TABELA DE EMBALAGEM DE TUBOS - RETANGULAR

ESPESSURA DO TUBO (mm)

Retangular (mm)	0.75	0.80	0.90	0.95	1.06	1.11	1.20	1.25	1.50	1.55	1.90	1.95	2.00	2.25	2.65	2.7	3.00	3.35	3.75	4.25	4.75
25 x 15	TOTAL	320	357	320	300	270	270	238	238	195	195										
	PESO MÉDIO KG	2.74	2.91	3.26	3.44	3.82	3.99	4.30	4.47	5.30	5.47										
30 x 20	TOTAL	195	240	195	195	195	195	195	168	168	130	130	130	110	99						
	PESO MÉDIO KG	3.44	3.66	4.11	4.33	4.81	5.03	5.42	5.64	6.71	6.93	8.39	8.60	8.80	9.82	11.41					
35 x 15	TOTAL	221	238	221	221	195	195	195	168	168											
	PESO MÉDIO KG	3.44	3.66	4.11	4.33	4.81	5.03	5.42	5.64	6.71	6.93										
40 x 20	TOTAL	165	165	165	165	165	165	165	135	135	108	108	96	96	80						
	PESO MÉDIO KG	4.14	4.42	4.95	5.22	5.81	6.08	6.55	6.82	8.12	8.38	10.18	10.43	10.68	11.94	13.90					
40 x 30	TOTAL			154	154	154	154	132	132	110	110	90	90	90	80	63					
	PESO MÉDIO KG			5.80	6.11	6.81	7.12	7.68	7.99	9.53	9.84	11.96	12.26	12.56	14.05	16.39					
50 x 20	TOTAL			162	162	144	144	135	135	120	104	96									
	PESO MÉDIO KG			5.80	6.11	6.81	7.12	7.68	7.99	9.53	9.84	11.96									
50 x 25	TOTAL						126	126	96	96	77	77	77	60	60		48				
	PESO MÉDIO KG						8.36	8.70	10.39	10.72	13.04	13.37	13.70	15.33	17.90		20.11				
50 x 30	TOTAL			108	108	108	108	108	96	96	80	80	77	70	60	48	48				
	PESO MÉDIO KG			6.65	7.01	7.80	8.16	8.81	9.16	10.94	11.30	13.75	14.10	14.44	16.16	18.88	19.22	21.22			
50 x 40	TOTAL		120	120	120	110	110	99	99	90	90	64	64	64	56	49	49	42	42	36	
	PESO MÉDIO KG		6.67	7.49	7.90	8.80	9.20	9.93	10.34	12.35	12.75	15.53	15.93	16.32	18.28	21.37	21.75	24.04	26.67	29.63	
60 x 30	TOTAL			120	120	112	112	112	112	91	91	66	66	66	60	48	48	45			
	PESO MÉDIO KG			7.49	7.90	8.80	9.20	9.93	10.34	12.35	12.75	15.53	15.93	16.32	18.28	21.37	21.75	24.04			
60 x 40	TOTAL			99	99	99	99	99	99	80	80	63	63	63	54	48	48	42			
	PESO MÉDIO KG			8.34	8.79	9.79	10.25	11.06	11.51	13.76	14.21	17.32	17.76	18.20	20.39	23.86	24.29	26.86			
70 x 25	TOTAL						104	104	84	72	66	66	66	60	50	50	45	40			
	PESO MÉDIO KG						10.49	10.92	13.05	13.47	16.42	16.84	17.25	19.33	22.61	23.01	25.44	28.23			
70 x 30	TOTAL			98	98	98	98	98	84	84	63	63	63	56	42	42	42				
	PESO MÉDIO KG			8.34	8.79	9.79	10.25	11.06	11.51	13.76	14.21	17.32	17.76	18.20	20.39	23.86	24.29	26.86			
70 x 50	TOTAL			88	88	88	88	80	80	64	64	49	49	49	42	36	36	36	30	25	
	PESO MÉDIO KG			10.03	10.58	11.79	12.33	13.32	13.86	16.58	17.12	20.89	21.42	21.96	24.62	28.84	29.36	32.49	36.11	40.20	
80 x 40	TOTAL			84	84	84	84	84	66	66	54	54	50	45	40	35	35				
	PESO MÉDIO KG			10.03	10.58	11.79	12.33	13.32	13.86	16.58	17.12	20.89	21.42	21.96	24.62	28.84	29.36	32.49			
80 x 60	TOTAL						*	*	56	56	42	42	42	36	30	30	30	25	25	25	25
	PESO MÉDIO KG						*	*	19.40	20.03	24.46	25.09	25.72	28.85	33.82	34.44	38.13	42.41	47.25	53.23	59.15
90 x 30	TOTAL			84	84	84	84	78	78	66	66	48	48	48	40	36	36	32			
	PESO MÉDIO KG			10.03	10.58	11.79	12.33	13.32	13.86	16.58	17.12	20.89	21.42	21.96	24.62	28.84	29.36	32.49			
90 x 50	TOTAL												36	36	30	30	28	24	24		
	PESO MÉDIO KG												25.72	28.85	33.82	34.44	38.13	42.41	47.25		
100 x 40	TOTAL							24	24	24	24	24	24	24	24	24	24	20	20	20	20
	PESO MÉDIO KG							19.40	20.03	24.46	25.09	25.72	28.85	33.82	34.44	38.13	42.41	47.25	53.23	59.15	
100 x 50	TOTAL							24	24	24	24	24	24	24	24	24	24	20	20	20	20
	PESO MÉDIO KG							20.81	21.49	26.24	26.92	27.60	30.96	36.31	36.98	40.95	45.55	50.77	57.23	63.61	
100 x 60	TOTAL							24	24	24	24	24	24	24	24	24	24	20	20	20	20
	PESO MÉDIO KG							2.217545	2.946662	0.29767	0.752966	0.475424	0.076620	0.800061	0.512162	0.769230	0.702146	0.295374	0.220324	0.071288	
100 x 80	TOTAL							20	20	20	20	20	20	20	20	20	20	16	16	16	16
	PESO MÉDIO KG							1.969768	1.790626	0.515917	0.330856	0.314505	0.204955	0.366232	0.466164	0.927367	4.84877	0.175933	0.018290	0.786662	
120 x 60	TOTAL							20	20	20	20	20	20	20	20	20	20	16	16		
	PESO MÉDIO KG							1.969768	1.790626	0.515917	0.330856	0.314505	0.204955	0.366232	0.466164	0.927367	4.84877	0.175933			
120 x 80	TOTAL							18	18	18	18	18	18	18	18	18	15	15	15	15	
	PESO MÉDIO KG							27.86	28.77	35.17	36.08	36.99	41.53	48.76	49.66	55.04	61.29	68.39	77.19	85.92	
150 x 50	TOTAL							21		21		21	21	21	0	18	18	18	15	15	
	PESO MÉDIO KG							27.86	28.77	35.17	36.08	36.99	41.53	48.76	0.00	55.04	61.29	68.39	77.19	85.92	

