

## TA – Type (Natural Latex)

### Ceiling balloons

Reference	TA 10	TA 20	TA 30	TA 45	TA 100
Colour	red	red or uncoloured			
Average Weight (gr)	10	20	30	45	100
Neck Diameter (cm)	2.3 +- 0.3	1.4 +- 0.3	1.4 +- 0.3	1.4 +-0.3	1.4 +- 0.3
Neck Length (cm)	5.0 +- 1.0	8.0 +- 2.0	8.0 +- 2.0	8.0 +-0.3	8.0 +- 2.0
Flaccid Body Length (cm)	13	24	28	36	53
Barely Inflated Diameter (cm)	8	15	18	23	34
Payload (gr)	0	0	0	0	0
Recommended Free Lift (gr)	4.4	29.8	59	104	294
Nozzle Lift (gr)	4.4	29.8	59	104	294
Gross Lift (gr)	14.4	49.8	89	149	394
Diameter at Release (cm)	29	44	53	63	87
Volume at Release (cu. m)	0.01	0.04	0.08	0.13	0.34
Rate of Ascent (m/min)	60	120	150	180	250
Diameter at Burst (cm)	45	70	88	110	196
Bursting Altitude (km)	11.8	12.4	13.1	14.0	18.8
Bursting Pressure (hPa)	199.5	181.5	162.5	141.0	66.2

## Sounding balloons

from 200 to 1000 gr

Reference	TA 200	TA 300	TA 350	TA 450	TA 500	TA 600	TA 700	TA 800	TA 1000
Color	uncolored								
Average Weight (gr)	200	300	350	450	500	600	700	800	1000
Neck Diameter (cm)	3	3	3	3	3	3	3	3	3
Neck Length (cm)	12	12	12	12	12	12	12	12	12
Flaccid Body Length more(cm)	86	108	118	135	143	157	171	184	206
Barely Inflated Diameter more(cm)	55	69	75	86	91	100	109	117	131
Payload (gr)	250	250	250	250	250	250	250	250	250
Recommended Free Lift (gr)	510	560	585	635	655	870	920	970	1060
Nozzle Lift (gr)	760	810	835	885	905	1120	1170	1220	1310
Gross Lift (gr)	960	1110	1185	1335	1405	1720	1870	2020	2310
Diameter at Release (cm)	117	123	125	130	133	142	146	150	157
Volume at Release (cu. m)	0.83	0.97	1.03	1.16	1.22	1.5	1.63	1.76	2.01
Rate of Ascent (m.min)	320	320	320	320	320	320	320	320	320
Diameter at Burst (cm)	300	378	412	472	499	602	653	700	786
Bursting Altitude (km)	21.2	24.7	25.9	27.7	28.4	30.8	31.8	32.6	33.9
Bursting Pressure (hPa)	45.3	26.3	21.9	16.6	14.9	10.4	8.9	7.9	6.6

from 1200 to 3000 gr

Reference	TA 1200	TA 1500	TA 2000	TA 3000
Color	uncolored/natural			
Average Weight (gr)	1200	1500	2000	3000
Neck Diameter (cm)	3	3	5	5
Neck Length (cm)	12	12	18	18
Flaccid Body Length more(cm)	226	253	289	357
Barely Inflated Diameter more(cm)	144	161	184	227
Payload (gr)	1050	1050	1050	1050
Recommended Free Lift (gr)	1190	1280	1420	1670
Nozzle Lift (gr)	2240	2330	2470	2720
Gross Lift (gr)	3440	3830	4470	5720
Diameter at Release (cm)	179	185	195	212
Volume at Release (cu. m)	2.99	3.33	3.89	4.97
Rate of Ascent (m/min)	320	320	320	320
Diameter at Burst (cm)	863	944	1054	1300
Bursting Altitude (km)	33.2	34.2	35.4	37.9
Bursting Pressure (hPa)	7.3	6.3	5.3	3.7

Other weights are available on request (i.e. : 1800 gr, etc...).

## TX – Type Special Latex Compound

The TX Type balloon was first developed in 1988 and research continues in seeking a special latex compound w/other chemicals which permits balloons to reach the Tropopause where temperatures are lower than -75 degrees celcius and altitudes exceed 10 hPA.

### Cold Weather Balloons

Reference	TX800	TX1000	TX1200	TX2000	TX3000
Color	uncolored/natural				
Average Weight (gr)	800	1000	1200	2000	3000
Neck Diameter (cm)	3	3	3	5	5
Neck Length (cm)	12	12	12	18	18
Flaccid Body Length more(cm)	184	206	226	289	357
Barely Inflated Diameter more(cm)	117	131	144	184	227
Payload (gr)	250	250	1050	1050	1050
Recommended Free Lift (gr)	970	1060	1190	1420	1670
Nozzle Lift (gr)	1220	1310	2240	2470	2720
Gross Lift (gr)	2020	2310	3440	4470	5720
Diameter at Release (cm)	150	157	179	195	212
Volume at Release (cu. m)	1.76	2.01	2.99	3.89	4.97
Rate of Ascent (m.min)	320	320	320	320	320
Diameter at Burst (cm)	738	828	910	1079	1331
Bursting Altitude (km)	33.6	35	34.2	35.8	38.3
Bursting Pressure (hPa)	6.9	5.6	6.3	5	3.5

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from 1200 to 3000 gr

<b>Reference</b>	<b>TA 1200</b>	<b>TA 1500</b>	<b>TA 2000</b>	<b>TA 3000</b>
<b>Color</b>	uncolored/natural			
<b>Average Weight (gr)</b>	1200	1500	2000	3000
<b>Neck Diameter (cm)</b>	3	3	5	5
<b>Neck Length (cm)</b>	12	12	18	18
<b>Flaccid Body Length more(cm)</b>	226	253	289	357
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