LATEX BALLOON/HELIUM CHART

Round Latex Balloons

Balloon Size	Approximate Volume	Approximate Lift	* Approximate Flying Time
7 inches	.104 cu. ft.	.087 ounce	2 hours
8 inches	.155 cu.ft.	.130 ounce	3 hours
9 inches	.221 cu. ft.	.186 ounce	6 hours
10 inches	.303 cu. ft.	.254 ounce	12 hours
11 inches	.403 cu. ft.	.339 ounce	14 hours
12 inches	.523 cu. ft.	.440 ounce	17 hours
13 inches	.666 cu. ft.	.559 ounce	18 hours
14 inches	.831 cu. ft.	.698 ounce	20 hours
15 inches	1.022 cu. ft.	.859 ounce	23 hours
16 inches	1.241 cu. ft.	1.042 ounces	27 hours
18 inches	1.767 cu. ft.	1.484 ounces	32 hours
24 inches	4.188 cu. ft.	3.518 ounces	2 days
30 inches	8.179 cu. ft.	6.871 ounces	2 days
36 inches	14.134 cu. ft.	11.872 ounces	3 days
40 inches	19.388 cu. ft.	1 pound .286 ounces	4 days
4 feet	33.502 cu. ft.	1 pound 12.142 ounces	5 days
5 feet	65.434 cu. ft.	3 pounds 6.964 ounces	5 days
6 feet	113.069 cu. ft.	5 pounds 14.978 ounces	6 days
8 feet	268.016 cu. ft.	16 pounds 12.016 ounces	6 days
12 feet	904.555 cu. ft.	47 pounds 7.826 ounces	9 days
20 feet	4187.753 cu. ft.	219 pounds 13.712 ounces	12 days

* Approximate Flying Times are purely estimates and are not guaranteed. A conservative measure should be used when looking at this chart. These estimates are based on indoor use with an ambient temperature of 70 degrees with standard room lighting. Direct sunlight, humidity, altitude and higher temperature adversely affect flying time and can cut the flying time dramatically. As an example a 17" balloon which shows a flying time of approximately 30 hours used outside on a hot sunny day per real life experiences will only last one day.

HELIUM has a lift of .84 ounces per cubic foot at sea level. To determine the volume of a balloon in cubic feet, multiply the cube of the radius in inches by 1.333, multiply the result by 3.1416, and then divide by 1728. diameter/2= Radius, radius *12 for radius in inches=ri, ri*ri*ri*3.1416/1728=cubic foot

To determine the lift of a helium filled balloon, multiply the volume in cubic feet by .84 to determine ounces, Divide ounces by 16 to determine pounds. Lift is reduced approximately 7.5% for each 1000 feet above sea-level. The information contained in this chart is computed at sea-level and is approximate.

Volume may vary due to over-inflation or under-inflation of the balloon. Lift & flying time are effected by such things as helium quality, weather, humidity, temperature, atmospheric conditions, and elevation above sea-level. As a "rule of thumb", reduce lift and flying time by