

Appendix P:

Sphere Volume

Estimates

Flask Volume [Liquid Height (cm)]	1000 ml	2000 ml	3000 ml	5000 ml	12,000 ml	22,000 ml	50,000 ml	72,000 ml
0.5	5	6	7	9	11	14	18	21
1.0	19	24	28	33	45	55	73	83
1.5	42	53	62	74	100	123	163	185
2.0	79	93	107	129	176	217	288	326
2.5	109	141	164	198	271	336	447	506
3.0	152	199	232	280	385	478	638	724
3.5	200	264	309	348	518	644	862	979
4.0	252	336	394	481	667	832	1117	1270
4.5	308	414	488	597	833	1042	1402	1596
5.0	366	497	589	723	1015	1273	1717	1957
5.5	426	585	696	859	1212	1524	2061	2351
6.0	487	676	808	1002	1422	1794	2433	2778
6.5	549	770	925	153	1646	2082	2832	3238
7.0	609	866	1046	1310	1882	2388	3258	3728
7.5	669	963	1170	1473	2129	2710	3709	4249
8.0	726	1061	296	1641	2388	3048	4185	4799
8.5		1158	1423	1812	2556	3401	4685	5378
9.0		1253	1551	1987	2933	3769	5208	5984
9.5		1347	1678	2165	3218	4150	5753	6618
10.0			1804	2344	3510	4542	6319	7278
10.5			1929	2523	3810	4948	6909	7963
11.0			2050	2703	4115	5364	7513	8673
11.5			2168	2881	4424	5790	8139	9407
12.0			2281	3058	4738	6225	8783	10,163
12.5				3232	5055	6668	9444	10,942
13.0				3402	5357	7120	10,121	10,163
13.5				3569	5696	7577	10,815	12,562

Flask Volume [Liquid Height (cm)]	1000 ml	2000 ml	3000 ml	5000 ml	12,000 ml	22,000 ml	50,000 ml	72,000 ml
14.0				3731	6017	8041	11,523	13,402
14.5					6340	8510	12,245	14,261
15.0					6661	8984	12,980	15,137
15.5					6980	9860	13,728	16,031
16.0					7297	9940	14,487	16,941
16.5					7610	10,421	15,257	17,867
17.0					7920	10,903	16,036	18,807
17.5					8224	11,358	16,825	19,761
18.0					8522	11,867	17,622	20,729
18.5						12,347	18,426	21,708
19.0						12,825	19,237	22,699
19.5						13,299	20,054	23,700
20.0						13,771	20,875	24,711
20.5						14,236	21,701	25,731
21.0						14,697	22,530	26,758
21.5							23,361	27,794
22.0							24,194	28,835
22.5							25,028	29,882
23.0							25,862	30,934
23.5							26,695	31,990
24.0							27,526	33,049
24.5							28,354	34,110
25.0							29,190	35,173
25.5							30,001	36,236
26.0							30,817	37,299
26.5							31,627	38,361
27.0							32,431	39,421
27.5								40,479
28.0								42,533
28.5								42,583
29.0								43,627
29.5								44,666
30.0								45,967

Source: From *Microgram*, 24, 7, 184, July, 1991.