CHROMatytic TECHnology PTY LTD
ABN 14 643 445 058
Website: www.chromtech.net.au
PO Box 435, 232 Forest Rd, Boronia, Victoria 3155, Australia
Tel: +61 3 9762 2034 Fax: +61 3 9761 1169 email: sales@chromtech.net.au

Capillary Tubing Volume

Internal Diameter			Volume	
mm	inches		ul / cm	ul / inch
0.12	0.005		0.127	0.323
0.17	0.007		0.249	0.632
0.25	0.01		0.507	1.288
0.51	0.02		2.026	5.146
1.02	0.04		8.103	20.581
1.625	0.063	1/16"	19.783	50.247
3.25	0.125	1/8"	79.131	200.986

HPLC Column Volume

Column ID x Length (mm)	Void Volume (ml)
1.0 x 100	0.06
1.0 x 150	0.08
1.0 x 250	0.14
1.0 x 300	0.17
2.1 x 100	0.24
2.1 x 150	0.37
2.1 x 250	0.61
2.1 x 300	0.73
4.6 x 100	1.16
4.6 x 150	1.75
4.6 x 250	2.90
4.6 x 300	3.49
7.8 x 100	3.35
7.8 x 150	5.02
7.8 x 250	8.36
7.8 x 300	10.04
10.0 x 100	5.50
10.0 x 150	8.25
10.0 x 250	13.75
10.0 x 300	16.49
21.0 x 100	24.25
21.0 x 150	36.37
21.0 x 250	60.61
21.0 x 300	72.74
50.0 x 100	137.45
50.0 x 150	206.17
50.0 x 250	343.61
50.0 x 300	412.33

* Note : Assumes an Average Pore Volume of 0.70.
Void Volume (ml) = (d^2 *Pi * L * Pore Volume) / 4
(d= diameter of column in cm; L=length of column in cm)

HPLC Solvent Properties

SOLVENT NAME	FORMULA WEIGHT	VISCOSITY (cP, 25°C)	DENSITY (g/ml)	REFRACTIVE INDEX (25°C)	BOILING PT (°C)	POLARITY INDEX	~ UV CUT OFF (nm)
Acetic Acid, Glacial	60	1.1	1.049	1.37	118	6.2	230
Acetone	58	0.3	0.791	1.356	56	5.4	330
Acetonitrile	41	0.34	0.786	1.341	82	6.2	190
Benzene	78	0.6	0.879	1.498	80	3	280
1-Butanol	74	2.98	0.81	1.399	118	3.9	215
2-Butanol	74	N.A.	0.807	1.397	100	N.A.	215
tert-Butyl Methyl Ether	88	0.28	0.758	1.368	55	2.5	210
Carbon Tetrachloride	154	0.9	1.594	1.457	77	1.6	263
Chloroform	119.4	0.53	1.483	1.443	61	4.4	245
Cyclohexane	84	0.9	0.774	1.423	81	0	200
Dichlorobenzene	147	1.33	1.306	1.551	180	2.7	295
1,4 Dioxane	88	1.54	1.03	1.422	101	4.8	215
Ether, Anhydrous	74	0.24	0.708	1.35	35	2.9	215
Ethyl Alcohol	46	1.2	0.794	1.36	78	0.88	210
Ethyl Acetate	88	0.43	0.9	1.37	77	4.3	256
n-Heptane	100	0.4	0.684	1.385	98	0.2	200
n-Hexane	86	0.3	0.659	1.372	69	0.06	195
Isobutyl Alcohol	74	4.7	0.802	1.384	108	3	220
Methanol	32	0.54	0.791	1.326	65	6.6	205
Methyl Ethyl Ketone	72	0.38	0.805	1.376	80	4.5	329
Methylene Chloride	85	0.41	1.327	1.421	40	3.4	233
Pentane	72	0.22	0.626	1.355	36	0	190
2-Propanol	60	1.9	0.785	1.384	82	4.3	210
Pyridine	79	0.88	0.98	1.507	115	5.3	330
Tetrahydrofuran	72	0.46	0.881	1.405	66	4.2	212
Toluene	92	0.55	0.867	1.494	110	2.4	284
Water	18	0.89	1	1.333	100	10.2	190