

Vapour Pressure of Common Solvents at elevated temperatures

	TEMPERATURE (°C)															
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250
1 Butanol	0.5	0.8	1.1	1.5	2.1	2.8	3.7	4.7	6.1	7.7	9.5	11.7	14.2	17.1	20.4	24.1
1 Propanol	1.2	1.6	2.3	3.2	4.1	5.4	7.0	9.0	11.3	14.0	17.2	20.9	25.2	30.0	35.5	41.7
Acetic Acid	0.6	0.8	1.1	1.4	1.9	2.5	3.2	4.1	5.1	6.3	7.8	9.5	11.4	13.7	16.3	19.2
Acetone	3.7	4.8	6.1	7.6	9.5	11.6	14.1	16.9	20.1	23.8	27.9	32.5	37.6	43.2	49.4	56.2
Acetonitrile	2.0	2.7	3.7	4.8	6.3	8.1	10.3	13.0	16.3	20.2	24.8	30.2	36.6	44.0	52.5	62.3
Benzene	1.8	2.5	3.1	3.9	4.9	5.9	7.2	8.6	10.3	12.2	14.4	16.9	19.6	22.7	26.1	29.9
Carbon tetrachloride	1.9	2.5	3.2	4.0	5.0	6.1	7.4	8.9	10.5	12.4	14.6	16.9	19.6	22.4	25.6	29.0
Chloroform	3.1	4.0	5.0	6.3	7.8	9.6	11.7	14.1	16.8	19.9	23.4	27.3	31.7	36.6	42.0	47.9
Cyclohexane	1.7	2.2	2.9	3.6	4.5	5.5	6.7	8.1	9.7	11.5	13.5	15.7	18.3	21.0	24.1	27.5
DCM	5.9	7.5	9.4	11.7	14.3	17.4	20.9	24.9	29.4	34.5	40.2	46.5	53.5	61.2	69.6	78.7
Di ethyl ether	6.1	7.6	9.4	11.5	14.0	16.8	20.0	23.6	27.7	32.2	37.3	42.9	49.0	55.7	63.1	71.0
Diglyme	0.1	0.2	0.3	0.4	0.6	0.8	1.0	1.3	1.7	2.2	2.8	3.6	4.4	5.5	6.7	8.1
Dioxane	1.0	1.3	1.7	2.3	2.9	3.7	4.7	5.9	7.2	8.8	10.6	12.7	15.2	17.9	21.0	24.4
DME	1.2	1.6	2.0	2.5	3.0	3.7	4.5	5.4	6.4	7.5	8.8	10.2	11.8	13.5	15.4	17.5
DMF	0.2	0.3	0.4	0.6	0.8	1.0	1.3	1.7	2.1	2.6	3.2	3.9	4.7	5.6	6.6	7.8
DMSO	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.7	0.9	1.2	1.5	2.0	2.5	3.2	4.0	5.0
Ethanol	2.1	2.9	4.0	5.3	7.0	9.1	11.6	14.7	18.3	22.6	27.6	33.4	40.1	47.7	56.3	65.9
Ether	6.1	7.6	9.4	11.5	14.0	16.8	20.0	23.6	27.7	32.2	37.3	42.9	49.0	55.7	63.1	71.0
Ethyl Acetate	2.0	2.7	3.5	4.4	5.6	6.9	8.5	10.4	12.5	14.9	17.6	20.7	24.1	27.9	32.1	36.8
Formic Acid	1.0	1.3	1.7	2.2	2.9	3.6	4.5	5.6	6.9	8.3	10.0	11.9	14.1	16.6	19.4	22.5
Heptane	1.2	1.7	2.2	2.9	3.8	4.8	6.1	7.6	9.5	11.6	14.1	16.9	20.2	24.0	28.2	33.0
Hexane	2.5	3.1	4.0	5.0	6.1	7.4	9.0	10.7	12.7	14.9	17.4	20.2	23.2	26.5	30.1	34.1
IPA	2.0	2.8	3.8	5.1	6.7	8.7	11.0	13.9	17.2	21.2	25.7	30.9	36.8	43.5	51.0	59.4
MEK	1.9	2.4	3.1	4.0	4.9	6.1	7.5	9.0	10.8	12.8	15.1	17.6	20.4	23.4	26.8	30.5
MeOH	3.3	4.5	6.0	7.9	10.2	13.0	16.5	20.6	25.4	31.1	37.7	45.3	54.0	63.9	75.1	87.7
NMP	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.7	1.0	1.2	1.6	2.0	2.5	3.1
Pentane	5.9	7.3	9.0	10.9	13.0	15.5	18.3	21.4	24.8	28.5	32.7	37.2	42.0	47.3	52.9	59.0
p-Xylene	0.3	0.4	0.6	0.8	1.1	1.4	1.7	2.2	2.7	3.4	4.1	5.0	6.0	7.1	8.4	9.9
t Butyl Alcohol	1.9	2.7	3.6	4.8	6.3	8.1	10.2	12.7	15.6	19.0	22.9	27.3	32.3	37.8	44.0	50.8
THF	2.7	3.5	4.4	5.5	6.9	8.4	10.1	12.2	14.4	17.0	19.9	23.1	26.6	30.5	34.7	39.4
Toluene	0.7	1.0	1.3	1.7	2.2	2.7	3.4	4.2	5.1	6.2	7.5	8.9	10.5	12.3	14.4	16.7
Water	1.0	1.2	1.8	2.6	3.7	5.0	6.6	8.5	10.8	13.5	16.5	20.0	23.8	28.1	32.8	37.9

Vapour Pressure (bar)

All vapour pressures shown are absolute values in bar

Recommended back pressure regulator (BPR) with values shown in PSI

100
250
350
500
600
Use high pressure system

Vapourtec recommends where possible using several BPRs in series rather than one large BPR.

$$350 = 250 + 100$$

$$500 = 250 + 250$$

$$600 = 250 + 250 + 100$$