

	Calculated from Hirsch- felder Eq.	Measured Observed from Nelson's Table	Experimental Based on Benzene $x=(0.0932)$ ($\frac{K}{0.55}$)
1. Benzene	0.0947	0.0932	0.0932
2. Toluene	0.0828	0.0849	0.0859
3. m-Xylene	0.0739	0.0670	0.0723
4. Acetone	0.1096	0.1049	0.1000
5. Methyl Ethyl Ketone	0.0943	0.0903	0.0881
6. Acrylonitrile	0.1147	0.1059	0.1048
7. n-Heptane	0.0721		0.0782
8. Chloroform	0.0953	0.0888	0.0892
9. n-Hexane	0.0789	0.0732	0.0796
10. Ethyl Acetate	0.0889	0.0861	0.0830
11. Trichloroethylene	0.0874	0.0875	0.0791
12. Carbon Tetrachloride	0.0857	0.0828	0.0796
13. Vinyl Chloride	0.1210		0.1149
14. Styrene	0.0764	0.0701	
15. Dichloromethane	0.1102	0.1037	
16. 1, 2 Dichloromethane	0.0939	0.0907	
17. Tetrachloroethylene	0.0786	0.0797	0.0816
18. 1, 4 Dioxane	0.0915	0.0922	0.0966
19. Ethyl Benzene	0.0750	0.0755	0.0898
20. Cumene	0.0690	0.0677	

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TABLE I - RECOVERY COEFFICIENTS

	Mean Value
Acetone	0.93
Acrylonitrile	0.84
Benzene	0.99
Butyl Acetate	1.00
Butyl Propionate	0.97
Carbon Tetrachloride	1.02
Chlorobenzene	0.95
Chloroform	0.97
Cumene	1.02
p-Cymene	1.00
1,2-Dichloroethane	0.99
cis-Dichloroethylene	0.96
trans-Dichloroethylene	0.93
Dichloromethane	0.92
Diethyl Phthalate	0.81
Dimethylformamide	0.41
1,4-Dioxane	0.92
Epichlorohydrin	0.96 $\pm .03$
Ethyl Acetate	0.98
Ethyl Benzene	1.02
Ethyl Butyrate	1.00
Ethyl Propionate	0.97
n-Heptane	1.04
n-Hexane	0.95
Mesityl Oxide	0.93
Mesitylene	0.98
Methyl Acetate	0.90
Methyl Ethyl Ketone	0.85
Methyl Isobutyl Ketone	0.92
Methyl Isobutyrate	0.96
Octane	1.03
Pentane	1.01
n-Propyl Acetate	0.98
iso-Propyl Acetate	0.94
Stoddard Solvent	1.00
Styrene	0.97
1,1,2,2-Tetrachloroethane	0.97
Tetrachloroethylene	1.00
Toluene	0.99
1,1,1-Trichloroethane	0.99
1,1,2-Trichloroethane	0.99
Trichloroethylene	1.00
Vinyl Acetate	0.92
Vinyl Chloride	0.90
m-Xylene	1.00

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TABLE II - Verified Recovery Coefficients

Compound	Recovery Coefficient $\pm 2\sigma$		Date Reassayed
	Reported	On stored OVM	
1. Acetone	0.93 $\pm$ 0.06	0.81 $\pm$ 0.04 0.82 $\pm$ 0.03	1-26-79 2-27-79
2. Acrylonitrile	0.84 $\pm$ 0.04	0.81 $\pm$ 0.04	1-26-79
3. Benzene	0.99 $\pm$ 0.03	1.00 $\pm$ 0.02	2-22-79
4. Carbon Tetrachloride	1.02 $\pm$ 0.04	1.02 $\pm$ 0.02	2-21-79
5. Chloroform	0.97 $\pm$ 0.04	0.98 $\pm$ 0.06	1-26-79
6. Cumene	1.02 $\pm$ 0.06	1.07 $\pm$ 0.08	2-14-79
7. 1,2-Dichloroethane	0.99 $\pm$ 0.01	1.01 $\pm$ 0.04	2-21-79
8. Dichloromethane	0.92 $\pm$ 0.02	0.94 $\pm$ 0.04	2-21-79
9. 1,4-Dioxane	0.92 $\pm$ 0.06	0.92 $\pm$ 0.06	2-15-79
10. Ethyl Acetate	0.98 $\pm$ 0.06	0.97 $\pm$ 0.02	2-21-79
11. Ethylbenzene	1.02 $\pm$ 0.06	1.03 $\pm$ 0.10	2-14-79
12. n-Heptane	1.04 $\pm$ 0.06	1.04 $\pm$ 0.02	2-22-79
13. n-Hexane	0.95 $\pm$ 0.04	0.99 $\pm$ 0.02	2-27-79
14. Methyl Ethyl Ketone	0.95 $\pm$ 0.02	0.92 $\pm$ 0.02	2-20-79
15. Stoddard Solvent	1.00 $\pm$ 0.06	1.00 $\pm$ 0.04	2-22-79
16. Styrene	0.97 $\pm$ 0.06	0.93 $\pm$ 0.02	2-15-79
17. Tetrachloroethylene	1.00 $\pm$ 0.05	1.01 $\pm$ 0.04	2-20-79
18. Toluene	0.99 $\pm$ 0.06	1.00 $\pm$ 0.12	2-14-79
19. Trichloroethylene	1.00 $\pm$ 0.04	1.00 $\pm$ 0.04	2-20-79
20. Vinyl Chloride	0.90 $\pm$ 0.02		
21. m-Xylene	1.00 $\pm$ 0.04	0.97 $\pm$ 0.06	2-27-79

TABLE III - Recovery Coefficients

Compound	Recovery Coefficient $\pm 2\sigma$		Date Assayed
		On stored OVM	
1. Butyl Acetate		1.00 $\pm$ 0.06	3-23-79
2. Chlorobenzene		0.95 $\pm$ 0.04	3-14-79
3. iso-Propyl Acetate		0.94 $\pm$ 0.02	3-24-79
4. Methyl Acetate		0.90 $\pm$ 0.02	3-23-79
5. n-Propyl Acetate		0.98 $\pm$ 0.02	3-24-79
6. Octane		1.03 $\pm$ 0.04	3-24-79
7. Pentane		0.02 $\pm$ 0.02	3-24-79
8. 1,1,2, 2-Tetrachlorethane		0.97 $\pm$ 0.02	3-1-79
9. 1,1,1-Trichloroethane		0.99 $\pm$ 0.02	3-1-79
10. 1,1,2-Trichloroethane		0.99 $\pm$ 0.04	3-1-79

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TABLE II RECOVERY COEFFICIENTS

<u>Compounds</u>	<u>Recovery Coefficient</u> $\pm 2\sigma$	<u>Date Assayed</u>
Butyl propionate	0.97 ± 0.01	4/5/79
p Cymene	1.00 ± 0.04	4/27/79
Dimethyl formamide	0.41 ± 0.02	4/19/79
Ethyl Butyrate	1.00 ± 0.01	4/3/79
Ethyl propionate	0.97 ± 0.04	4/27/79
Methyl Isobutyrate	0.96 ± 0.03	4/3/79
* ethylene Glycol	0.96	4/24/80

* 5% Methylene Chloride in Acetone

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