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Tabla 1. Modelos para el cálculo de coeficientes de actividad.

Modelo	Ecuaciones
MARGULES	$\ln(\gamma 1) = \left[\overline{A}_{12} + 2(\overline{A}_{21} - \overline{A}_{12})x_1\right]x_2^{\,2}$ $\qquad$ $\ln(\gamma 2) = \left[\overline{A}_{21} + 2(\overline{A}_{12} - \overline{A}_{21})x_2\right]x_1^{\,2}$
VAN LAAR	$\ln(\gamma 1) = A_{12}\left(\frac{A_{21}x_2}{A_{12}x_1 + A_{21}x_2}\right)^2$ $\qquad$ $\ln(\gamma 2) = A_{21}\left(\frac{A_{12}x_1}{A_{12}x_1 + A_{21}x_2}\right)^2$
WILSON	$\ln(\gamma 1) = -\ln(x_1 + \Lambda_{12}x_2) + x_2\left(\frac{\Lambda_{12}}{x_1 + \Lambda_{12}x_2} - \frac{\Lambda_{21}}{x_2 + \Lambda_{21}x_1}\right)^2$ $\ln(\gamma 2) = -\ln(x_2 + \Lambda_{21}x_1) - x_1\left(\frac{\Lambda_{12}}{x_1 + \Lambda_{12}x_2} - \frac{\Lambda_{21}}{x_2 + \Lambda_{21}x_1}\right)^2$ $\Lambda_{12} = \frac{\upsilon_2^L}{\upsilon_1^L}\exp\left(-\frac{\lambda_{12} - \lambda_{11}}{RT}\right)$; $\Lambda_{21} = \frac{\upsilon_1^L}{\upsilon_2^L}\exp\left(-\frac{\lambda_{21} - \lambda_{22}}{RT}\right)$ υ_i^L Volumen molar del componente i en fase líquida

Tabla 2. Constantes para los modelos de Margules, Van Laar y Wilson de algunos sistemas LV

System	Margules		van Laar		Wilson (cal/mol)	
	$\overline{A}_{12}$	$\overline{A}_{21}$	A_{12}	A_{21}	$(\lambda_{12} - \lambda_{11})$	$(\lambda_{21} - \lambda_{22})$
Acetone (1), chloroform (2)	−0.8404	−0.5610	−0.8643	−0.5899	116.1171	−506.8519
Acetone (1), methanol (2)	0.6184	0.5788	0.6184	0.5797	−114.4047	545.2942
Acetone (1), water (2)	2.0400	1.5461	2.1041	1.5555	344.3346	1482.2133
Carbon tetrachloride (1), benzene (2)	0.0948	0.0922	0.0951	0.0911	7.0459	59.6233
Chloroform (1), methanol (2)	0.8320	1.7365	0.9356	1.8860	−361.7944	1694.0241
Ethanol (1), benzene (2)	1.8362	1.4717	1.8570	1.4785	1264.4318	266.6118
Ethanol (1), water (2)	1.6022	0.7947	1.6798	0.9227	325.0757	953.2792
Ethyl acetate (1), ethanol (2)	0.8557	0.7476	0.8552	0.7526	58.8969	570.0439
n-Hexane (1), ethanol (2)	1.9398	2.7054	1.9195	2.8463	320.3611	2189.2896
Methanol (1), benzene (2)	2.1411	1.7905	2.1623	1.7925	1666.4410	227.2126
Methanol (1), ethyl acetate (2)	1.0016	1.0517	1.0017	1.0524	982.2689	−172.9317
Methanol (1), water (2)	0.7923	0.5434	0.8041	0.5619	82.9876	520.6458
Methyl acetate (1), methanol (2)	0.9605	1.0120	0.9614	1.0126	−93.8900	847.4348
1-Propanol (1), water (2)	2.7070	0.7172	2.9095	1.1572	906.5256	1396.6398
2-Propanol (1), water (2)	2.3319	0.8976	2.4702	1.0938	659.5473	1230.2080
Tetrahydrofuran (1), water (2)	2.8258	1.9450	3.0216	1.9436	1475.2583	1844.7926
Water (1), acetic acid (2)	0.4178	0.9533	0.4973	1.0623	705.5876	111.6579
Water (1), 1-butanol (2)	0.8608	3.2051	1.0996	4.1760	1549.6600	2050.2569
Water (1), formic acid (2)	−0.2966	−0.2715	−0.2935	−0.2757	−310.1060	1180.8040

Tabla 3. Constantes para ecuación de Antoine. $\log\left(P_i^{Sat}\right) = A - B/(T + C)$ T en ºC ; P en torr

Species	Antoine constants†			Applicable temperature region, °C	v^L, liquid molar volume, cm³/g·mol
	A	B	C		
Acetic acid	8.02100	1936.010	258.451	18–118	57.54
Acetone	7.11714	1210.595	229.664	(−13)–55	74.05
Benzene	6.87987	1196.760	219.161	8–80	89.41
1-Butanol	7.36366	1305.198	173.427	89–126	91.97
Carbon tetrachloride	6.84083	1177.910	220.576	(−20)–77	97.09
Chloroform	6.95465	1170.966	226.232	(−10)–60	80.67
Ethanol	7.58670	1281.590	193.768	78–203	58.68
Ethanol	8.11220	1592.864	226.184	20–93	58.68
Ethyl acetate	7.10179	1244.951	217.881	16–76	98.49
Formic acid	6.94459	1295.260	218.000	36–108	37.91
n-Hexane	6.91058	1189.640	226.280	(−30)–170	131.61
Methanol	8.08097	1582.271	239.726	15–84	40.73
Methyl acetate	7.06524	1157.630	219.726	2–56	79.84
1-Propanol	8.37895	1788.020	227.438	(−15)–98	75.14
2-Propanol	8.87829	2010.320	252.636	(−26)–83	76.92
Tetrahydrofuran	6.99515	1202.290	226.254	23–100	81.55
Water	8.07131	1730.630	233.426	1–100	18.07

FUENTE: [Perry]