

## Correction to "Activity Coefficients at Infinite Dilution for Hydrocarbons in Fatty Alcohols Determined by Gas–Liquid Chromatography"

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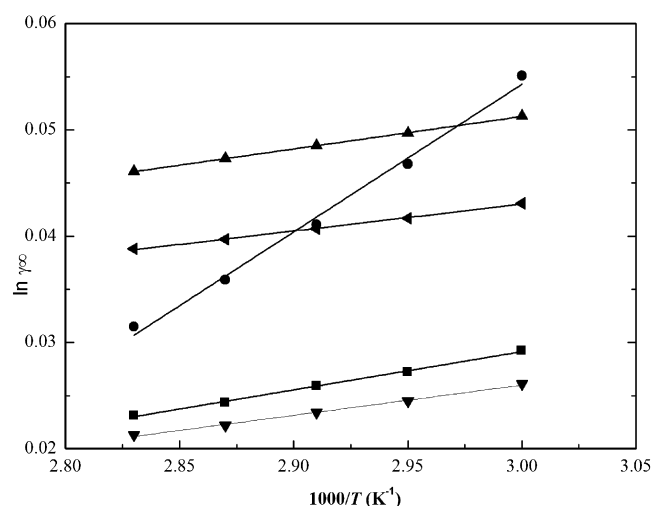
*J. Chem. Eng. Data* **2011**, 56 (4), 850–858. DOI: 10.1021/je1005517

In the original document (*J. Chem. Eng. Data*, **2011**, 56 (4), 850–858) on pages 851 and 852, the values tabulated in Tables 1 and 2 correspond to natural logarithm of the activity

The correct sentence (in second paragraph) of page 857 is "The values of  $s$  show their high polarity" instead of the incorrect sentence "The values of  $s$  show their weak polarity."

Table 3. Values of  $\Delta H^{E,\infty}$ ,  $\Delta H^{\text{dis}}$ , and  $\Delta H^{\text{vap}}$  as Determined from Equations 8 to 10 in the Two Solvents

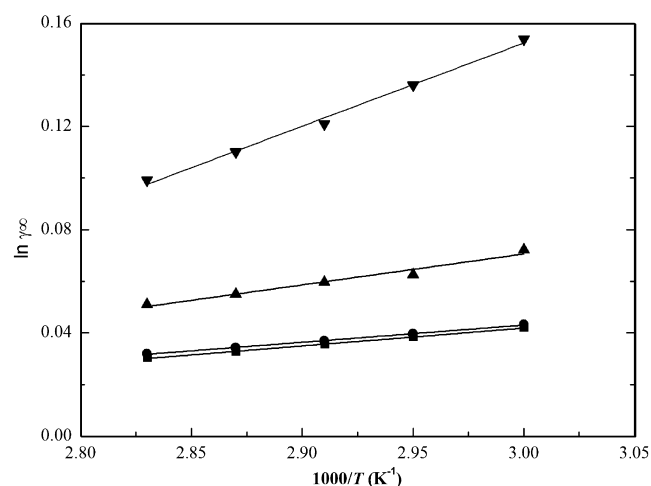
solute	octadecanol			eicosanol			literature
	$\Delta H^{E,\infty}$	$\Delta H^{\text{dis}}$	$\Delta H^{\text{vap}}$	$\Delta H^{E,\infty}$	$\Delta H^{\text{dis}}$	$\Delta H^{\text{vap}}$	$\Delta H_{\text{vap}}$
	$\text{kJ}\cdot\text{mol}^{-1}$	$\text{kJ}\cdot\text{mol}^{-1}$	$\text{kJ}\cdot\text{mol}^{-1}$	$\text{kJ}\cdot\text{mol}^{-1}$	$\text{kJ}\cdot\text{mol}^{-1}$	$\text{kJ}\cdot\text{mol}^{-1}$	$\text{kJ}\cdot\text{mol}^{-1}$
hexane	1.259	−29.127	30.387	0.926	−28.409	29.335	28.84 <sup>a</sup>
ethanol	0.590	−41.000	41.590	1.985	−37.744	39.728	39.33 <sup>b</sup>
tetrachloride	0.049	−30.352	30.400	0.982	−29.163	30.144	33.47 <sup>b</sup>
butyl acetate	0.810	−39.935	40.744	1.643	−39.003	40.647	43.89 <sup>c</sup>
toluene	0.258	−35.501	35.760	11.342	−23.919	35.262	33.43 <sup>a</sup>
diethyl ether	0.323	−25.007	25.330	0.528	−24.435	24.963	27.37 <sup>c</sup>

<sup>a</sup>Reference 20. <sup>b</sup>Reference 32. <sup>c</sup>Reference 33.

**Figure 2.** Experimental activity coefficients at infinite dilution for the alkanes and olefins in the solvent Octadecanol as a function of temperature; ■, pentane; ●, hexane; ▲, octane; ▼, pentene; ◄, heptene; —, linear regression.

coefficients at infinite dilution ( $\ln \gamma^\infty$ ) and not the values of  $\gamma^\infty$ . In consequence Tables 3 and 4 and Figures 2 to 18 given in the manuscript are not correct. The resulting correct tables and figures are reported below. As a consequence some sentences are also corrected in the text.

The sentence of page 855 which says in part, "The  $\gamma^\infty$  values are relatively slight ( $< 1$ ) in the two solvents"; is not correct. The correct sentence is "The  $\gamma^\infty$  values are larger than unity ( $> 1$ ) in the two solvents".



**Figure 3.** Experimental activity coefficients at infinite dilution for the alcohols in the solvent octadecanol as a function of temperature; ■, methanol; ●, ethanol; ▲, propanol; ▼, butanol; —, linear regression.

The correct sentence (in the last paragraph) of page 857 is "The  $Q_{12}^\infty$  values are higher for octadecanol (Figure 18)..." instead of the incorrect sentence "Comparing the  $Q_{12}^\infty$  values of octadecanol with eicosanol (Figure 18), the  $Q_{12}^\infty$  values of octadecanol are almost twenty times higher."

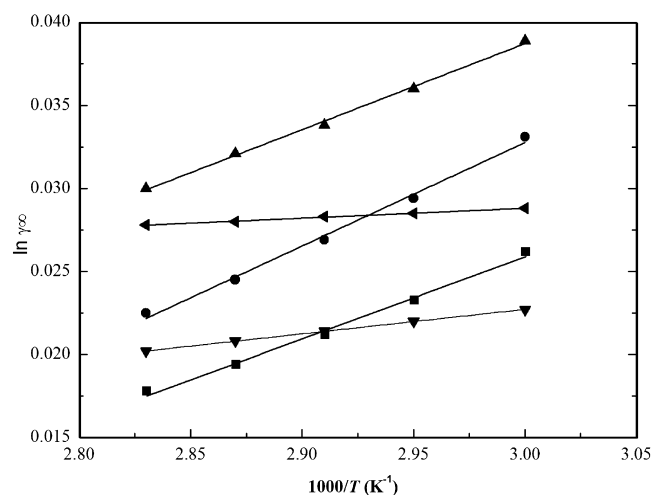
In the caption of Figure 1, it should be "eicosanol" instead of "eicoanol".

The authors apologize for the mistakes.

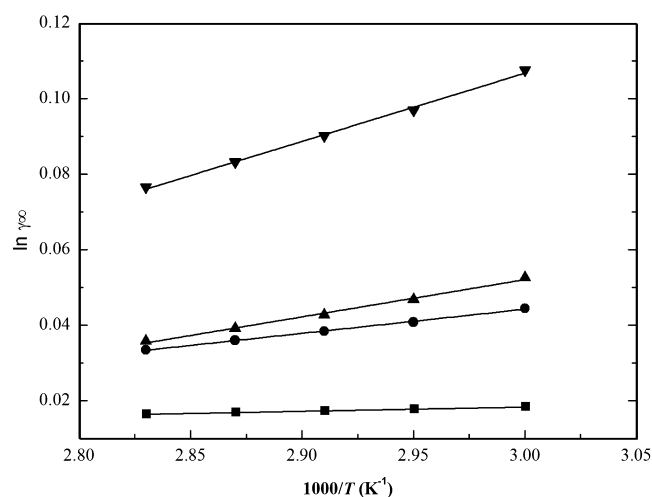
Published: April 11, 2013

Table 4. Abraham Parameters for Solvents Studied at Different Temperatures<sup>a</sup>

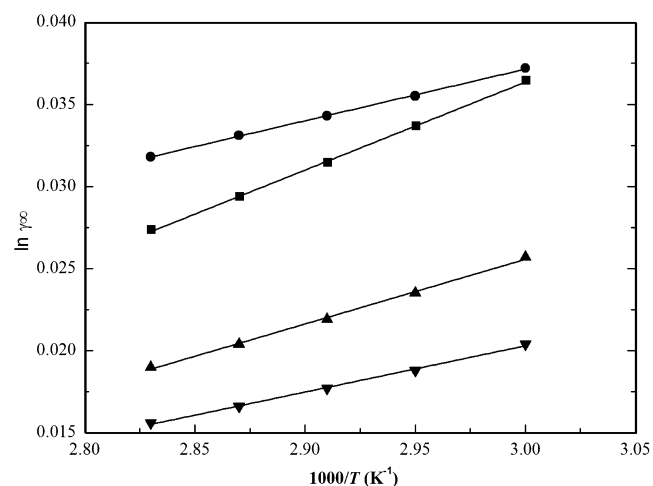
solvent	T/K	c	r	s	a	b	l	R <sup>2</sup>
octadecanol	333.15	0.159	−0.751	1.361	2.699	−0.737	0.699	0.992
	338.15	0.146	−0.741	1.339	2.591	−0.736	0.679	0.992
	343.15	0.132	−0.728	1.316	2.484	−0.735	0.660	0.993
	348.15	0.120	−0.716	1.293	2.381	−0.734	0.642	0.993
	353.15	0.107	−0.703	1.271	2.280	−0.732	0.624	0.993
eicosanol	338.15	0.531	−1.373	2.035	2.535	−1.282	0.499	0.989
	343.15	0.482	−1.282	1.951	2.420	−1.215	0.492	0.986
	348.15	0.440	−1.207	1.873	2.318	−1.163	0.483	0.984
	353.15	0.402	−1.143	1.805	2.224	−1.120	0.475	0.981

<sup>a</sup>R<sup>2</sup> is the correlation coefficient.

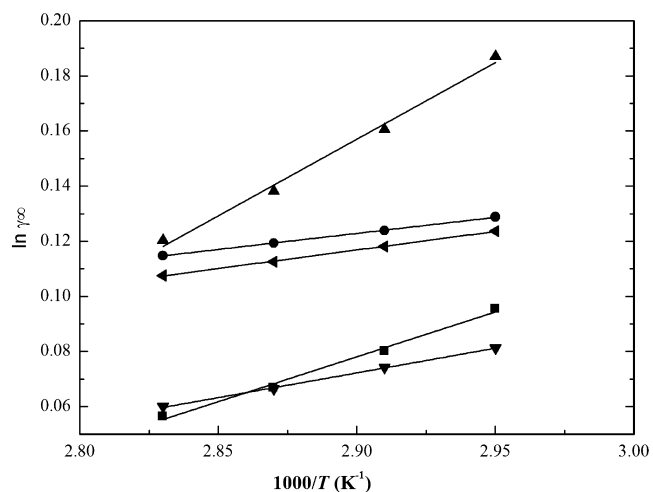
**Figure 4.** Experimental activity coefficients at infinite dilution for the chloroalkanes in the solvent octadecanol as a function of temperature; ■, dichloromethane; ●, chloropropane; ▲, chlorobutane; ▼, chloroform; ◆, tetrachloromethane; —, linear regression.



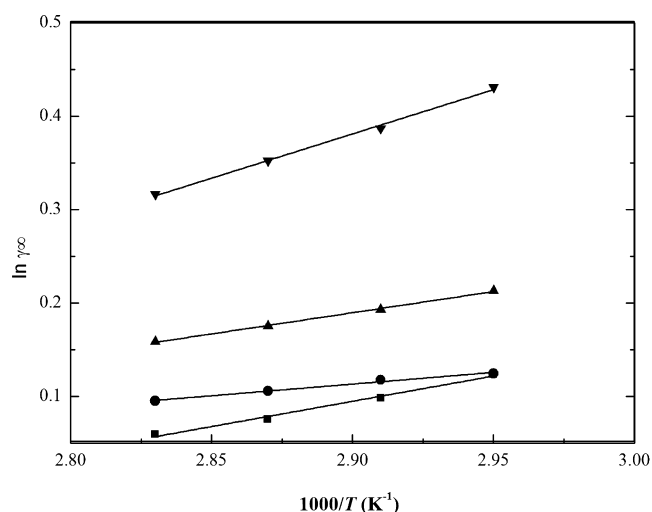
**Figure 5.** Experimental activity coefficients at infinite dilution for the ketone and acetates in the solvent octadecanol as a function of temperature; ■, propanone; ●, ethyl acetate; ▲, butyl acetate; ▼, acetonitrile; —, linear regression.



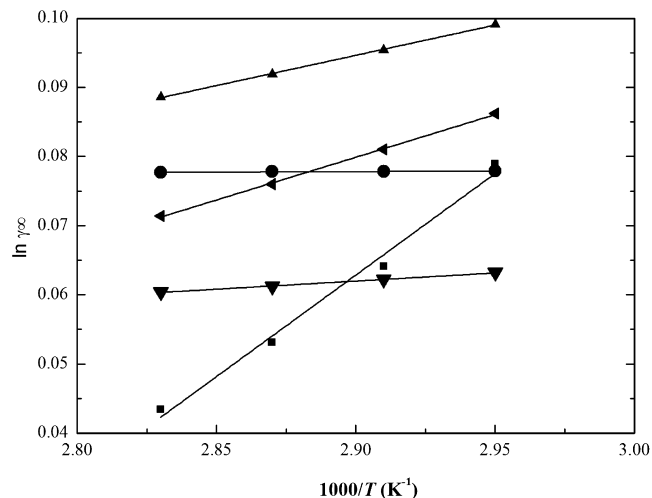
**Figure 6.** Experimental activity coefficients at infinite dilution for the cycloalkane, aromatic and ethers in the solvent octadecanol as a function of temperature; ■, cyclohexane; ●, toluene; ▲, diethyl ether; ▼, THF; —, linear regression.



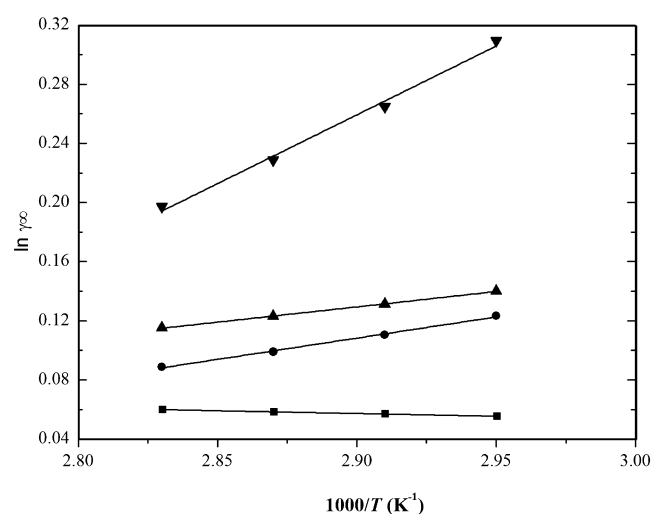
**Figure 7.** Experimental activity coefficients at infinite dilution for the alkanes and olefins in the solvent eicosanol as a function of temperature; ■, pentane; ●, hexane; ▲, octane; ▼, pentene; ◆, heptene; —, linear regression.



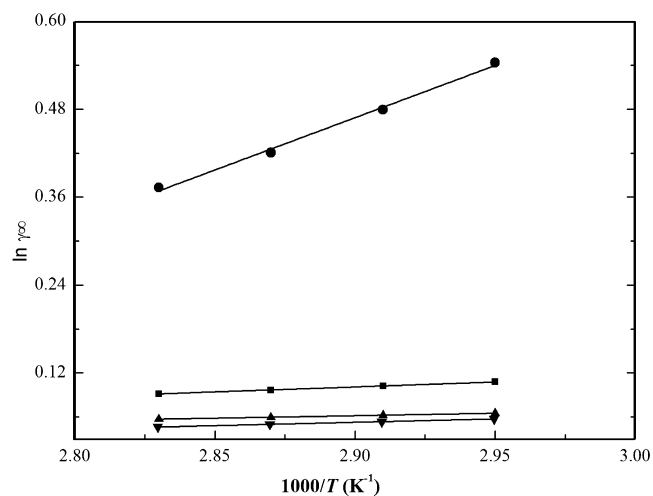
**Figure 8.** Experimental activity coefficients at infinite dilution for the alcohols in the solvent eicosanol as a function of temperature; ■, methanol; ●, ethanol; ▲, propanol; ▼, butanol; —, linear regression.



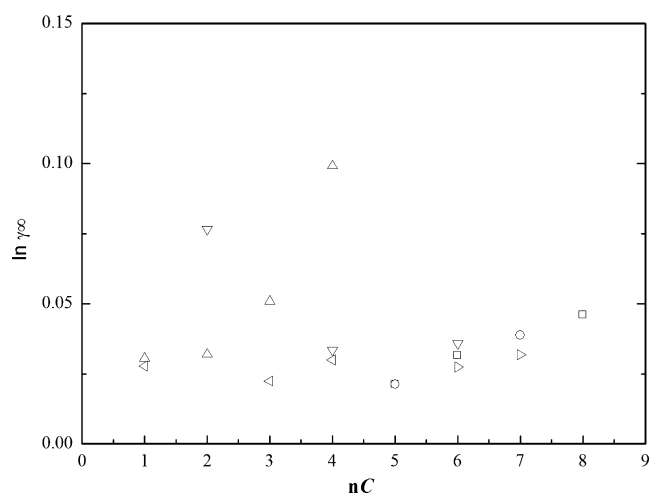
**Figure 9.** Experimental activity coefficients at infinite dilution for the chloroalkanes in the solvent eicosanol as a function of temperature; ■, dichloromethane; ●, chloropropane; ▲, chlorobutane; ▼, chloroform; ◄, tetrachloromethane; —, linear regression.



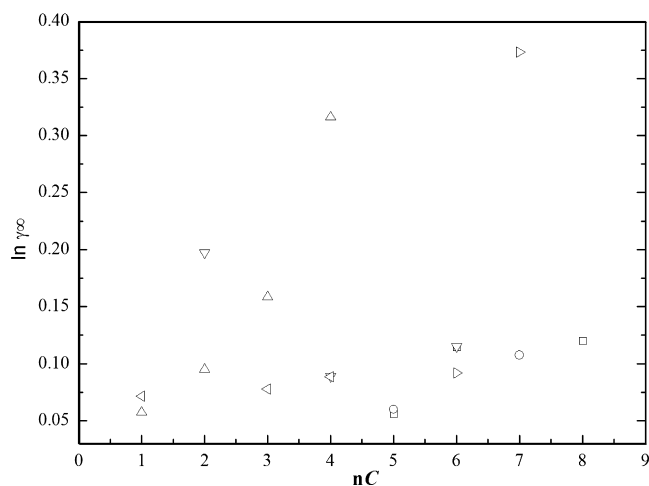
**Figure 10.** Experimental activity coefficients at infinite dilution for the ketone and acetates in the solvent eicosanol as a function of temperature; ■, propanone; ●, ethyl acetate; ▲, butyl acetate; ▼, acetonitrile; —, linear regression.



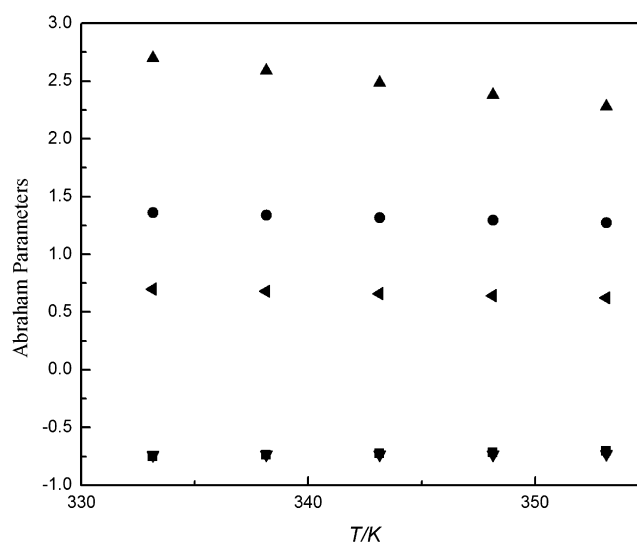
**Figure 11.** Experimental activity coefficients at infinite dilution for the cycloalkane, aromatic and ethers in the solvent eicosanol as a function of temperature; ■, cyclohexane; ●, toluene; ▲, diethyl ether; ▼, THF; —, linear regression.



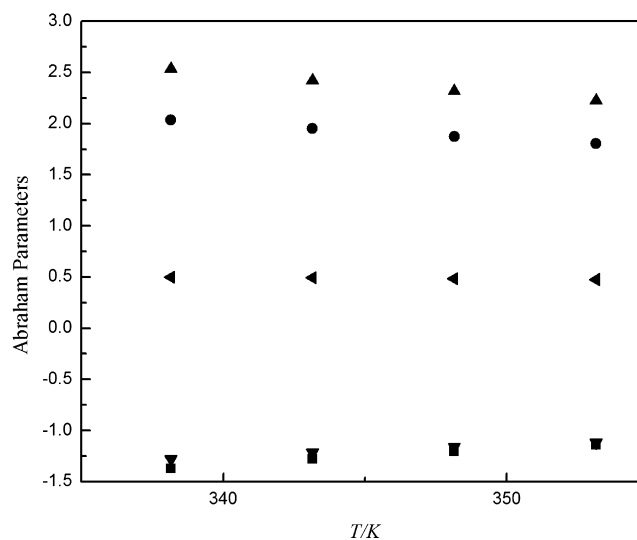
**Figure 12.** Variation of experimental activity coefficients for the solutes in the solvent octadecanol according to the carbon's atom numbers at  $T = 353.15$  K. □, alkanes; ○, olefins; △, alcohols; ▽, acetate; ◁, chloroalkanes; ▷, aromatics and cycloalkane.



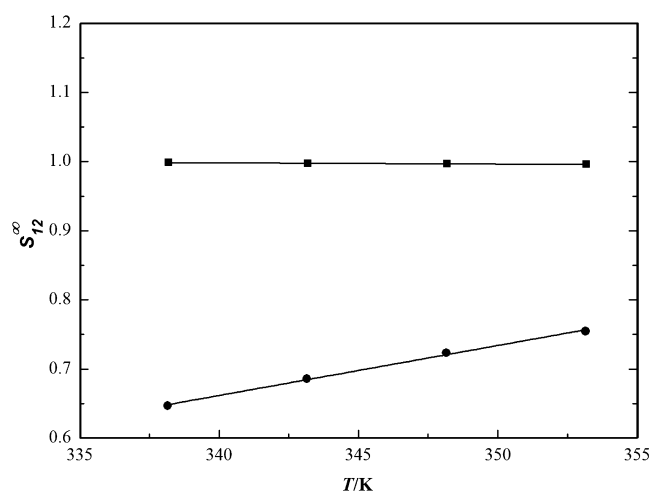
**Figure 13.** Variation of experimental activity coefficients for the solutes in the solvent eicosanol according to the carbon's atom numbers at  $T = 353.15$  K. □, alkanes; ○, olefins; △, alcohols; ▽, acetate; ◁, chloroalkanes; ▷, aromatics and cycloalkane.



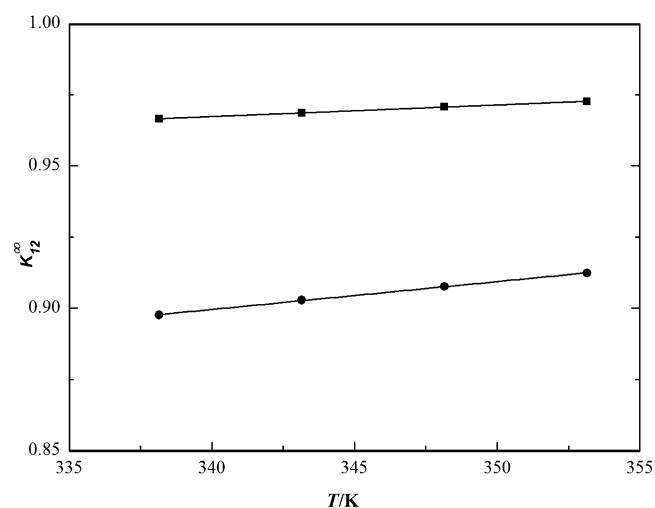
**Figure 14.** Evolution of Abraham parameters with temperature for octadecanol. ■,  $r$ ; ●,  $s$ ; ▲,  $a$ ; ▼,  $b$ ; ◄,  $l$ .



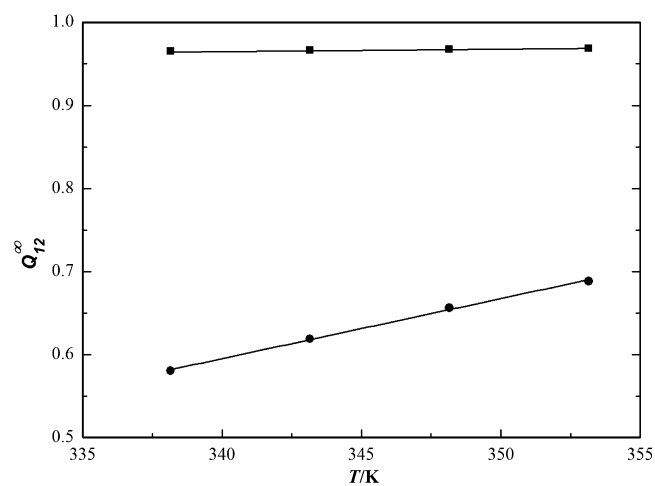
**Figure 15.** Evolution of Abraham parameters with temperature for eicosanol. ■,  $r$ ; ●,  $s$ ; ▲,  $a$ ; ▼,  $b$ ; ◄,  $l$ .



**Figure 16.** Selectivity at infinite dilution for two solvents at different temperatures regarding the separation of cyclohexane from toluene: ■, in octadecanol; ●, in eicosanol; —, linear regression.



**Figure 17.** Capacity at infinite dilution for two solvents at different temperatures regarding the separation of cyclohexane from toluene: ■, in octadecanol; ●, in eicosanol; —, linear regression.



**Figure 18.** Quantity at infinite dilution for two solvents at different temperatures regarding the separation of cyclohexane from toluene: ■, in octadecanol; ●, in eicosanol; —, linear regression.