J. Chem. Thermodynamics 89 (2015) 314–315

Contents lists available at ScienceDirect

J. Chem. Thermodynamics

journal homepage: www.elsevier.com/locate/jct

Corrigendum

Corrigendum to "Experimental and Nitta–Chao model prediction of high pressure density of *p*-xylene with dialkyl carbonates or *n*-alkanes" [J. Chem. Thermodyn. 69 (2014) 193–200]

Ana Gayol [a], Raquel E. Martini [b], Alfonsina E. Andreatta [b,c], José L. Legido [a], Lidia Casás [d,*]

[a] Departamento de Física Aplicada, Facultad de Ciencias, Universidad de Vigo, Lagoas Marcosende, s/n, E-36310 Vigo, Spain
[b] IDTQ – Grupo Vinculado PLAPIQUI – CONICET – FCEFyN, Universidad Nacional de Córdoba, X5016GCA, Av. Vélez Sarsfield 1611, Córdoba, Argentina
[c] Universidad Tecnológica Nacional, Facultad Regional San Francisco, Av. de la Universidad 501, 2400 San Francisco, Córdoba, Argentina
[d] Laboratoire de Thermique, Energétique et Procédés (LaTEP), École Nationale Supérieure en Génie des Technologies Industrielles, Université de Pau et des Pays de l'Adour, rue Jules Ferry, BP 7511, 64075 Pau, France

It has come to our attention that in our paper published in The Journal of Chemical Thermodynamics (J. Chem. Thermodyn. 69 (2014) 193–200), the density values for the composition $x_1 = 0.8031$ of (*n*-octane (1) + *p*-xylene (2)) binary system are misprinted in table 6 for all temperatures evaluated. This also affects figure 2b and table 8 for the modified Tait equation coefficients.

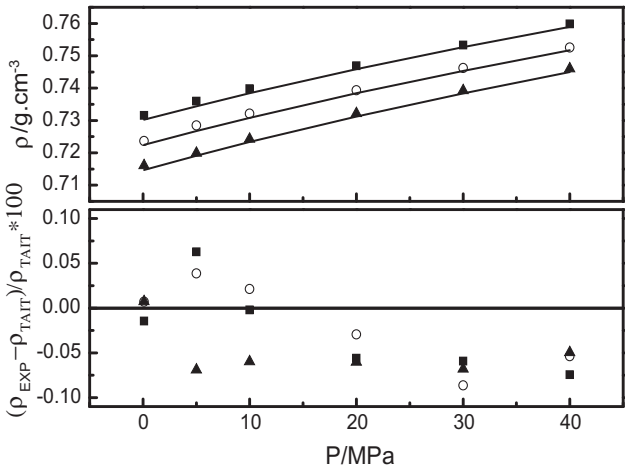

FIGURE 2b. Comparison between experimental (symbols) with Tait correlation (lines) of high pressure binary mixtures density ρ and relative density deviation plot at fixed compositions against pressure P of (*n*-octane (1) + *p*-xylene (2)) ($x_1 = 0.8031$). The temperatures are: ■ $T = 288.15$ K, ○ $T = 298.15$ K, ▲ $T = 308.15$ K.

We regret these unintentional mistakes and include below the correct values for density, modified Tait equation coefficients, and figure 2b.

Furthermore, the uncertainty of the variables in tables 4–7 are: $u(T) = 5 \cdot 10^{-2}$ K; $u(x_1) = \pm 10^{-4}$; $u(\rho) = 10^{-4}$ g · cm^{-3}; and the combined expanded uncertainty with level of confidence 0.95 ($k = 2$) for the density is: $U_c(\rho) = 2 \cdot 10^{-4}$ g · cm^{-3}.

Density values for the composition $x_1 = 0.8031$ of (*n*-octane (1) + *p*-xylene (2)) system, corresponding to table 6.

	ρ/(g · cm^{-3})					
*x*1	0.1	5	10	20	30	40
P/MPa						
			T = 288.15 K			
0.8031	0.7315	0.7359	0.7398	0.7469	0.7533	0.7598
			T = 298.15 K			
0.8031	0.7237	0.7285	0.7321	0.7393	0.7462	0.7525
			T = 308.15 K			
0.8031	0.7161	0.7199	0.7242	0.7321	0.7392	0.7459

DOI of original article: http://dx.doi.org/10.1016/j.jct.2013.09.039
* Corresponding author. Tel.: +33 559 407946; fax +33 559 407740.
E-mail address: lidia.casas@univ-pau.fr (L. Casás).

http://dx.doi.org/10.1016/j.jct.2015.05.017
0021-9614/© 2015 Elsevier Ltd. All rights reserved.

Modified Tait equation coefficients the composition x_1 = 0.8031 of (*n*-octane (1) + *p*-xylene (2)) system, corresponding to table 8.

x_1	ρ_{00}/g · cm^{-3}	ρ_{01}/g · cm^{-3} · K^{-1}	C	B_0/MPa	B_1/MPa · K^{-1}	B_2/MPa · K^{-2}	AAD^a/g · cm^{-3}	APD^a/%
			(n-octane (1) + p-xylene (2))					
0.8031	0.9550	$-7.7562 \cdot 10^{-4}$	0.0868	−288.00	2.7227	$-5.1 \cdot 10^{-3}$	$3.4 \cdot 10^{-4}$	$4.6 \cdot 10^{-2}$

[a] $AAD : \frac{1}{N}\sum_{i=1}^{N}|\rho_i^{exp} - \rho_i^{cal}|$; $APD = \frac{100}{N}\sum_{i=1}^{N}\left|\frac{\rho_i^{exp} - \rho_i^{cal}}{\rho_i^{exp}}\right|$ where N is the number of experimental data, exp: experimental data and *cal*: calculated values.