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ERRATUM

Erratum to: Thermodynamic Prediction of Glycine Polymerization as a Function of Temperature and pH Consistent with Experimentally Obtained Results

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In Table 1 on page 174, the values of the standard molal entropy ($S°$) at 25 °C and 1 bar for $GlyGly^-$, and those of the standard molal heat capacity ($C_p°$) at 25 °C and 1 bar for $GlyGly^+$ and $GlyGly^-$ are incorrect. The correct values are 49.72, 55.9 and 15.5, respectively. The errors of the $C_p°$ values originated from the use of unit (J mol^{-1} K^{-1}) instead of (cal mol^{-1} K^{-1}). The error of the $S°$ value originated from mistyping. The corrected Table 1 is given here.

In Eq. 39 on page 185, the positive sign in the term $\left(\frac{1}{T+\Theta}\right)$ must be changed to the negative sign. The corrected Eq. 39 is written below.

$$\begin{aligned}\Delta G^o = {} & \Delta G_f^o - S^o_{P_r,T_r}(T - T_r) - c_1\left[T\ln\left(\frac{T}{T_r}\right) - T + T_r\right] \\ & - c_2\left\{\left[\left(\frac{1}{T-\Theta}\right) - \left(\frac{1}{T_r-\Theta}\right)\right]\left(\frac{\Theta - T}{\Theta}\right)\right\} \\ & + c_2\left\{\frac{T}{\Theta^2}\ln\left[\frac{T_r(T-\Theta)}{T(T_r-\Theta)}\right]\right\} + a_1(P - P_r) \\ & + a_2\ln\left(\frac{\Psi + P}{\Psi + P_r}\right) \\ & + \left(\frac{1}{T-\Theta}\right)\left[a_3(P - P_r) + a_4\ln\left(\frac{\Psi + P}{\Psi + P_r}\right)\right] \\ & + \omega\left(\frac{1}{\epsilon} - 1\right) - \omega_{P_r,T_r}\left[Y_{P_r,T_r}(T_r - T) + \frac{1}{\epsilon_{P_r,T_r}} - 1\right]\end{aligned} \tag{39}$$

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Table 1 Standard molal thermodynamic data at 25 °C and 1 bar and revised HKF equation of state parameters for Gly, GlyGly, GlyGlyGly, and DKP in their zwitterionic and ionization states

Species	$\Delta_f G^{\circ a}$	$\Delta_f H^{\circ a}$	$S^{\circ b}_{Pr,\ Tr}$	$C_p^{\circ b}$	$V^{\circ c}$	$a_1^d \times 10$	$a_2^e \times 10^{-2}$	a_3^f	$a_4^g \times 10^{-4}$	c_1^b	$c_2^g \times 10^{-4}$	$\omega^e \times 10^{-5}$
$Gly^{\pm}$	−88.62	−122.83	37.89	9.3[h]	43.2[h]	11.30[h]	0.71[h]	3.99[h]	−3.04[h]	28.5[h]	−8.40[h]	0.23[h]
Gly^{+}	−91.82[i]	−123.79[i]	45.44[i]	39.7	49.9	15.57	−8.26	−6.62	0.47	39.5	−1.21	−0.33
Gly^{-}	−75.27[i]	−112.27[i]	28.57[i]	−0.8	45.7	9.74	3.54	20.07	−4.73	21.6	−7.92	0.69
$GlyGly^{\pm}$	−117.00	−175.69	52.75	28.0	77.4	17.66	6.71	50.07	−15.91	69.3	−17.71	0.59
$GlyGly^{+}$	−121.28[i]	−175.72[i]	67.03[i]	55.9	84.7	22.05	−8.00	−22.99	5.69	34.1	−0.10	−2.46
$GlyGly^{-}$	−105.72[i]	−165.32[i]	49.72[i]	15.5	80.4	16.22	3.80	3.69	0.48	16.2	−6.81	−1.44
$GlyGlyGly^{\pm}$	−144.74	−226.97	70.73	44.2[h]	112.1[h]	24.14	6.97	33.69	−10.69	63.9[h]	−16.60[h]	−1.54[h]
$GlyGlyGly^{+}$	−149.13[i]	−227.17[i]	84.80[i]	72.2	119.4	28.52	−7.74	−39.37	10.91	28.7	1.01	−4.59
$GlyGlyGly^{-}$	−133.70[i]	−217.00[i]	67.14[i]	31.7	115.1	22.69	4.06	−12.69	5.70	10.8	−5.70	−3.57
DKP	−57.44[j]	−99.30[j]	53.50[j]	34.4	76.8	16.84	3.27	10.94	−5.14	28.5	−7.44	−2.30
[Gly]	−3.75	−3.62	15.91	11.3	9.6	1.83	2.57	1.22	−1.27	6.9	2.20	0.00
[PBB]	−24.11	−47.67	3.01	−4.5[h]	26.3[h]	8.10[h]	−3.75[h]	−6.73[h]	1.13[h]	11.2[h]	−7.50[h]	0.05[h]

Data and parameters for the side chain group of Gly ([Gly]) and the peptide backbone ([PBB]) are also listed

[a] kcal mol^{-1}

[b] cal mol^{-1} K^{-1}

[c] cm^3 mol^{-1}

[d] cal mol^{-1} bar^{-1}

[e] cal mol^{-1}

[f] cal K mol^{-1} bar^{-1}

[g] cal K mol^{-1}

[h] Dick et al. (2006)

[i] Goldberg et al. (2002)

[j] Shock (1992a)