

Erratum to: Package *FLUIDS*. Part 4: thermodynamic modelling and purely empirical equations for H₂O-NaCl-KCl solutions

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Published online: 27 March 2013
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Erratum to: Miner Petrol (2012) 105:1–29
DOI 10.1007/s00710-012-0192-z

The purely empirical equation for the liquidus in the KCl-field in the ternary H₂O-NaCl-KCl system is given by a polynomial function in temperature:

$$x(\text{H}_2\text{O})^S = c_0 + c_1 \cdot T_C + c_2 \cdot T_C^2 + c_3 \cdot T_C^3 + c_4 \cdot T_C^4 \quad (5a)$$

$$c_i = \sum_j c_{ij} \cdot (R_{\text{NaCl}})^j \quad (5b)$$

The values of c_{ij} that are given in the text and Table 4 are partly incorrect.

The correct definitions of c_i values in Eq. 5a are:

$$\begin{aligned} c_0 &= 94.678 - 7.46512 \cdot \exp(-1.95722 \cdot R_{\text{KCl}}) \\ &\quad - 15.1276 \cdot \exp(-15.1442 \cdot R_{\text{KCl}}) \\ c_1 &= -0.0668981 - 0.107939 \cdot \exp(-6.98181 \cdot R_{\text{KCl}}) \\ c_2 &= -3.7964 \cdot 10^{-5} + 0.000346 \cdot R_{\text{KCl}} - 0.00016211 \cdot (R_{\text{KCl}})^2 \\ c_3 &= -7.1777 \cdot 10^{-7} + 3.5629 \cdot 10^{-7} \cdot R_{\text{KCl}} \\ c_4 &= 1.0423 \cdot 10^{-10} + 3.3412 \cdot 10^{-10} \cdot R_{\text{NaCl}} - 4.3135 \cdot 10^{-10} \cdot (R_{\text{NaCl}})^2 \\ &\quad + 1.9585 \cdot 10^{-9} \cdot (R_{\text{NaCl}})^3 - 8.5994 \cdot 10^{-10} \cdot (R_{\text{NaCl}})^4 \end{aligned}$$

The wrong numbers are remnants of an older version in the development of this model. All calculations and images that are used in this paper are based on the correct numbers.

The online version of the original article can be found at <http://dx.doi.org/10.1007/s00710-012-0192-z>.

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