Gailhanou et al. (2013), Thermodynamic data of oxides used for estimating the thermodynamic properties of the modified compositions of clay minerals – Appendix 5.

Table A-5-1. Standard enthalpies of formation and entropies of oxides at 298.15 K.

Oxide	$\Delta H_f°$(298.15K) kJ/mol	$S°$ J/(K mol)	Ref.
Corundum(alpha) $Al_2O_{3(cr)}$	-1675.7 (± 1.3)	50.92 (± 0.10)	[1], [2]
$MgO_{(cr)}$	-601.6 (± 0.3)	26.95 (± 0.15)	[1], [2]
$MnO_{(cr)}$	-385.2 (± 0.5)	59.71 (± 0.4)	[3], [2]
Rutile $TiO_{2(cr)}$	-944.0 (± 0.8)	50.62 (± 0.3)	[1], [2]

Table A-5-2. Heat capacity functions $C_p°(T)$ of oxides, between 298 K and 573 K and at 1 bar.

Oxide	$C_p°$(298.15K) J/(K.mol)	Ref.	a J/(K mol)	b J/(K^2 mol)	c J.K/mol	Ref.
Corundum(alpha) $Al_2O_{3(cr)}$	79.033	[1], [2]	98.25	36.75	-26.83	[2]
$MgO_{(cr)}$	37.237	[1], [2]	46.87	5.34	-9.98	[2]
$MnO_{(cr)}$	45.44	[3], [2]	46.48	8.12	-3.68	[2]
Rutile $TiO_{2(cr)}$	55.080	[1], [2]	63.20	11.82	-10.35	[2]
Note. Maier-Kelley function $C_p°(T) = a + b\ 10^{-3}\ T + c\ 10^{-5}\ T^{-2}$						

References

[1] Cox, J.D., Wagman, D.D., and Medvedev, V.A. (1989) CODATA Key Values for Thermodynamics. Hemisphere Publishing Corporation, New York.

[2] Blanc, P., Lassin, A., Piantone, P., Azaroual, M., Jacquemet, N., Fabbri, A., and Gaucher, E.C. (2012) Thermoddem : A geochemical database focused on low temperature water/rock interactions and waste materials. Applied Geochemistry, 27, 2107-2116.

[3] Wagman, D.D., Evans, W.H., Parker, V.B., Schumm, R.H., Halow, I., Bailey, S.M., Churney, K.L., and Nutall, R.L. (1982) The NBS Tables of Chemical Thermodynamic Properties. Journal of Physical and Chemical Reference Data, 11, Suppl. 2.