

Gailhanou et al. (2013), References for heat capacity data of mineral impurities. – Appendix 3.

Table A-3. References for Cp data of mineral impurities, used for the calculations of Cp of the studied clay minerals.

Mineral	References for Cp data	T range
Quartz	Richet et al. (1982)	50 K -520 K
Cristobalite	Richet et al. (1982)	50 K -520 K
Kaolinite	Robie and Hemingway (1991) Robie and Hemingway (1995)	7 K – 298 K 298.15 K – 520 K
Muscovite	Robie et al. (1976) Robie and Hemingway (1995)	5 K – 370 K 370 K – 520 K
Diopside	Krupka et al. (1985a) Krupka et al. (1985b)	5 K – 380 K 380 K – 520 K
Rutile	Shomate (1947) Robie and Hemingway (1995)	52 K – 298 K 298.15 K – 520 K
Tremolite	Robie and Stout (1963)	12 K – 298 K
Goethite	Krupka et al. (1985b) Majzlan et al. (2003)	298.15 K – 520 K 0.4 K – 375 K

References

- Krupka, K.M., Hemingway, B.S., Robie, R.A., Kerrick, D.M., and Ito, J. (1985a) Low-temperature heat capacities and derived thermodynamic properties of anthophyllite, diopside, enstatite, bronzite, and wollastonite. *American Mineralogist*, 70, 249-260.
- Krupka, K.M., Hemingway, B.S., Robie, R.A., and Kerrick, D.M. (1985b) High-temperature heat capacities and derived thermodynamic properties of anthophyllite, diopside, dolomite, enstatite, bronzite, talc, tremolite, and wollastonite. *American Mineralogist*, 70, 261-271.
- Majzlan, J., Lang, B.E., Stevens, R., Navrotsky, A., Woodfield, B.F., and Boerio-Goates, J. (2003) Thermodynamics of Fe oxides: Part I. Entropy at standard temperature and pressure and heat capacity of goethite (α -FeOOH), lepidocrocite (γ -FeOOH), and maghemite (γ -Fe₂O₃). *American Mineralogist*, 88, 846-854.
- Richet, P., Bottinga, Y., Denielou, L., Petitet, J.P., and Tequi, C. (1982) Thermodynamic properties of quartz, cristobalite and amorphous SiO₂: drop calorimetry measurements between 1000 and 1800 K and a review from 0 to 2000 K. *Geochimica et Cosmochimica Acta*, 46, 2639-2658.
- Robie, R.A. and Hemingway, B.S. (1991) Heat capacities of kaolinite from 7 to 380 K and of DMSO-intercalated kaolinite from 20 to 310 K. The entropy of kaolinite Al₂Si₂O₅(OH)₄. *Clays and Clay Minerals*, 39, 362-368.
- Robie, R.A. and Hemingway, B.S. (1995) Thermodynamic properties of minerals and related substances at 298.15 K and 1 Bar (10⁵ Pascals) pressure and at higher temperatures. U.S. Geological Survey Bulletin 2131.
- Robie, R.A. and Stout, J.W. (1963) Heat capacity from 12 to 305 K and entropy of talc and tremolite. *Journal of Physical Chemistry*, 67, 2252-2256.

Robie, R.A., Hemingway, B.S., and Wilson, W.H. (1976) The heat capacities of calorimetry conference copper and of muscovite $KAl_2(AlSi_3)O_{10}(OH)_2$, pyrophyllite $Al_2Si_4O_{10}(OH)_2$, and illite $K_3(Al_7Mg)(Si_{14}Al_2)O_{40}(OH)_8$ between 15 and 375 K and their standard entropies at 298.15 K. Journal of Research of the U.S. Geological Survey, 4, 631-644.

Shomate, C.H. (1947) Heat capacities at low temperatures of titanium dioxide (rutile and anatase). America Chemical Society Journal, 69, 218-219.