

Cu-Li (Copper-Lithium)

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The Cu-Li phase diagram in [Massalski2] was redrawn from [1986Pel]. No intermediate phase was shown in the phase diagram.

Figure 1 shows the Cu-Li phase diagram calculated by [2009Gas]. The existence of a new phase, Cu_2Li_3 , was concluded by analyzing temperature dependence of the electromotive force for Cu-Li alloys with various compositions.

Table 1 shows Cu-Li crystal structure data.

References

- 1986Pel:** A.D. Pelton, The Cu-Li (Copper-Lithium) System, *Bull. Alloy Phase Diagr.*, 1986, 7(2), p 142-144
- 2009Gas:** W. Gąsior, B. Onderka, Z. Moser, A. Dębski, and T. Gancarz, Thermodynamic Evaluation of Cu-Li Phase Diagram from EMF Measurements and DTA Study, *Calphad* 2009, 33, p 215-220

Table 1 Cu-Li crystal structure data

Phase	Composition, at.% Li	Pearson symbol	Space group	Strukturbericht designation	Prototype
(Cu)	0-18.3	<i>cF4</i>	<i>Fm$\bar{3}m$</i>	<i>A1</i>	Cu
Cu_2Li_3	60
(β Li)	100	<i>cI2</i>	<i>Im$\bar{3}m$</i>	<i>A2</i>	W

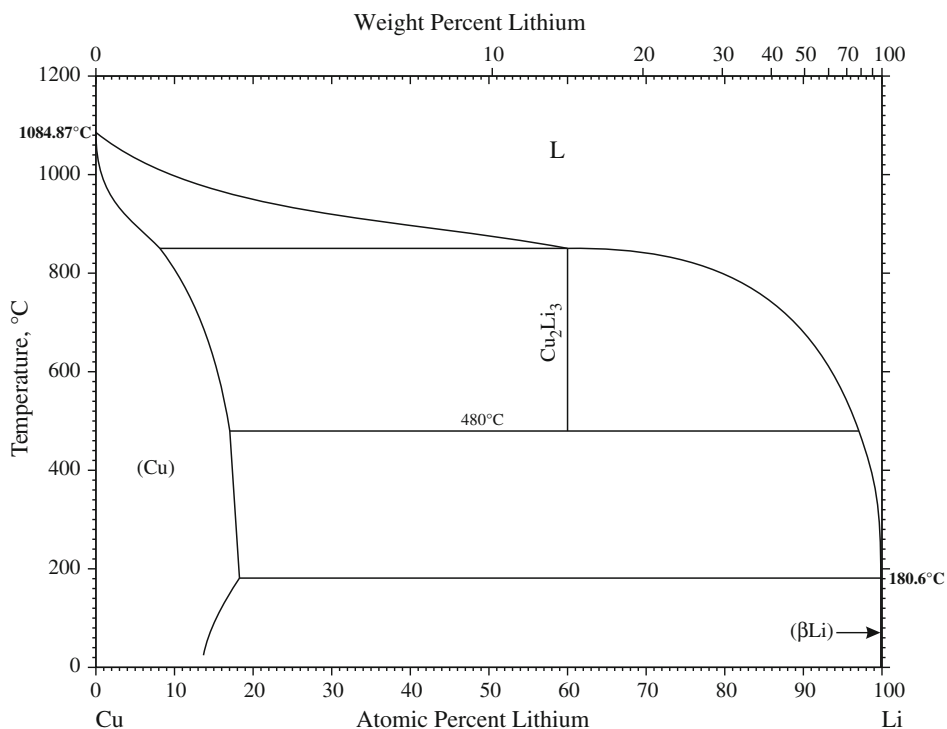


Fig. 1 Cu-Li phase diagram