

# Li-Y (Lithium-Yttrium)

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The Li-Y phase diagram was unknown in [Massalski2].

Figure 1 shows the Li-Y phase diagram constructed on the basis of a schematic phase diagram and a table of invariant reaction temperatures and compositions given in [1998Gan].

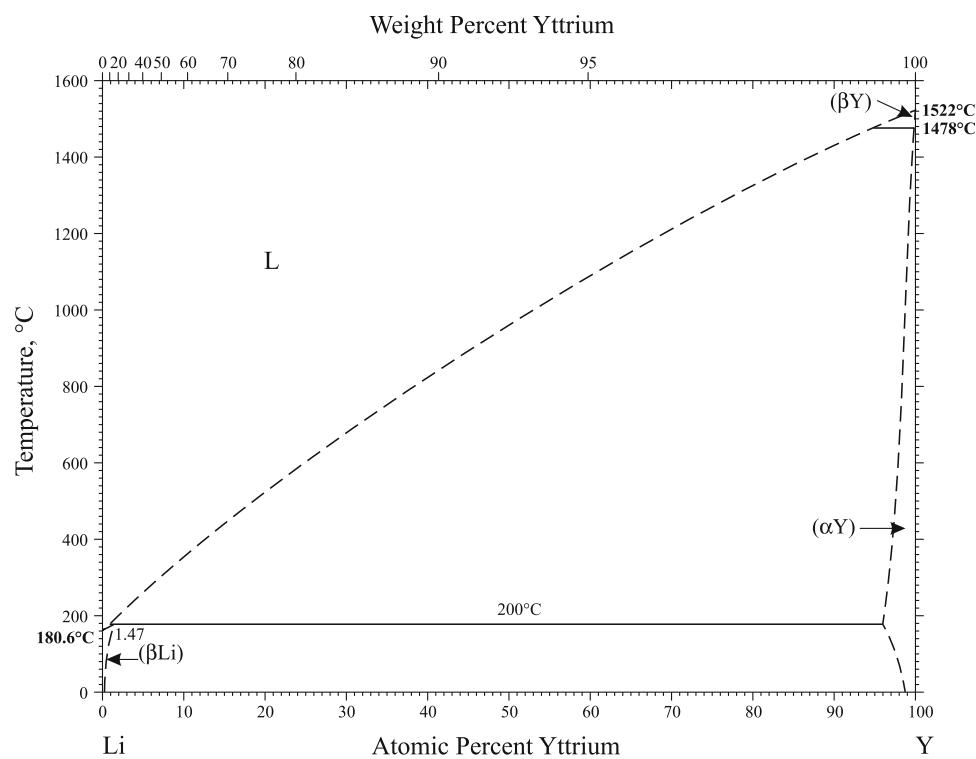
Table 1 shows Li-Y crystal structure data.

## Reference

**1998Gan:** N.N. Ganiev, Kh.M. Nazarov, and M.D. Badalov, Interaction of Lithium with Rare-Earth Metals, *Izv. Ross. Akad. Nauk, Metally*, 1998, (6), p 109-112, in Russian; TR: *Russ. Metall.*, 1998, (6), p 132-136

**Table 1** Li-Y crystal structure data

| Phase         | Composition, at.% Y | Pearson symbol | Space group  | Strukturbericht designation | Prototype |
|---------------|---------------------|----------------|--------------|-----------------------------|-----------|
| ( $\beta$ Li) | 0-1.47              | $cI2$          | $Im\bar{3}m$ | $A2$                        | W         |
| ( $\beta$ Y)  | ? to 100            | $cI2$          | $Im\bar{3}m$ | $A2$                        | W         |
| ( $\alpha$ Y) | ? to 100            | $hP2$          | $P6_3/mmc$   | $A3$                        | Mg        |



**Fig. 1** Li-Y phase diagram