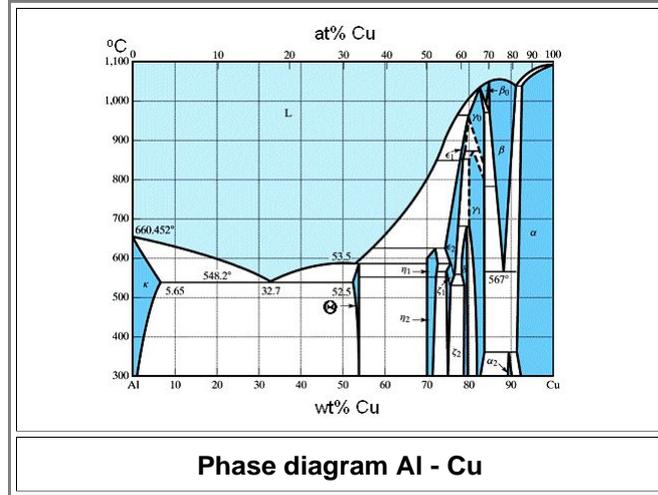


## Phase Diagram of Copper-Aluminum

Illustration

Here is the Aluminum - Copper phase diagram. Yes, it is quite complicated - but only if you alloy more than about 53 at% copper.

- The aluminum -  $\text{Al}_2\text{Cu}$  phase diagram; i.e. the part left to the 53 at% Cu, is about as simple as you can have it for two atoms that cannot mix atomically at any large ratio. It has the same structure as the lead-tin ["solder" phase diagram](#) we looked at before.



- The intermetallic compound  $\text{Al}_2\text{Cu}$  at 53 at% Cu is called the  $\theta$  phase.