



**Database name:** COST507 Light Alloys Database  
**Database acronym:** COST2 **Database version:** 2.2  
**Database owner:** COST507, European Commission  
**Database segment:** Light Metals Alloys

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**Brief description**

COST2 contains data for 192 light alloy solution phases within a framework of 19 elements.

**Applications**

Light alloy design and engineering.

**Included Elements**

Al B C Ce Cr Cu Fe Li Mg Mn N Nd Ni Si Sn V Zn  
Zr Zr

**Included Phases**

192 possible phases have been considered in this database.

**Assessed Systems**

This database is developed on the basis of the critical assessment work on light alloys established by the EU COST 507 Project, Round II (COST 1998). The project was devoted to the developments of new light alloys, with participants of 28 institutions from many EU countries (Austria, Belgium, Finland, France, Germany, Greece, Netherlands, Norway, Portugal, Spain, Sweden and UK) and Switzerland and Russia.

The database compiles the published assessment data, primarily on binary light alloys, resulted from the entire COST 507 Project. Some ternary systems are also included.

**Validation**

The quality of the assessed data may vary from one subsystem to another, and is therefore recommended that the use of this database should be always with care. Adjustment in some subsystems may be needed if the application is made for industrial alloys. This database presents a good resource for teaching and a fairly reasonable basis for academic research on light alloys.

**Limits**

Critical calculations must always be verified by equilibrium experimental data; it is the user's responsibility to verify the calculations but Thermo-Calc Software is interested to know about any significant deviations in order to improve any future release.

**Scientific Models & References**

See the Thermo-Calc Software reference list available at:

[http://www.thermocalc.com/DOWNLOAD\\_AREA/References.html](http://www.thermocalc.com/DOWNLOAD_AREA/References.html)