



Database name: Thermotech Zr-based Alloys Database
Database acronym: TTZR1 **Database version:** 1.0
Database owner: ThermoTech
Database segment: Zirconium Based Alloys

Brief description

TTZR1 is suitable database for calculation of phase equilibria in multicomponent Zr-based alloys.

Applications

Zr-based alloy design and engineering.

Included Elements

C Cr Fe H Hf N Nb Ni O Si Sn Zr

Included Phases

A5B3	LAVES	ZR2SI	ZR4SN	ZRSN2
ALPHA	LIQUID	ZR3FE	ZR5FE4NB	
BETA	MH2	ZR3SI	ZR7FESN2	
C15_FCC	ZR2M	ZR3SI2	ZRCN	

Assessed Systems

All phases have been critically assessed and treated by some appropriate thermodynamic models (e.g. the Sublattice Model for solid solutions and liquid mixture phases), which are applicable over a wide temperature-pressure-composition range.

Scientific Models & References

See the Thermo-Calc Software reference list available at:

http://www.thermocalc.com/DOWNLOAD_AREA/References.html