	ME-Al Version 1.0	ME-Fe Version 1.0	ME-Ni Version 1.0
Included elements	Al,Cr,Cu,Fe,Li,Mg,Mn,Ni, Sc,Sn,Si,Ti,Zn,Zr	Fe,Al,B,C,Co,Cr,Cu,H,Hf,La ,Mn,Mo,N,Nb,Ni,O,P,Pd,S ,Si,Ti,V,W,Y	Ni,Al,B,C,Co,Cr,Cu,Fe,Hf,La, Mn,Mo,N,Nb,O,Re,Ru,S,Si, Ta,Ti,V,W,Y,Zr
Standard phase descriptions [1]) [1])Typical examples are listed. In case of more comprehensive interest, please contact the database developer	Multi-component liquid, Al-alloy phase Intermetallic equilibrium precipitates	Multi-component liquid, Fe-alloy phase Equilibrium carbides, nitrides, carbo-nitrides Intermetallic equilibrium precipitates	Multi-component liquid, Ni-alloy phase Intermetallic equilibrium precipitates Ni3Nb-type δ phase Ni3Al-type γ´ phase Equilibrium carbides, nitrides, carbo-nitrides
Special [1])	Descriptions of metastable Mg-Si and Al-Mg-Si precipitates, GP-zones, and Mg-Si co-clusters. Descriptions of metastable Al7CuFe precipitate, re-assessed Al-Cu-Fe phase descriptions. Description of Cu-solubility in Al13Fe4. Description of Sn-solubility in Mg2Si. Description of Cu- and Sc-solubility in Al3Zr.	Description of metastable Cu-Fe bcc-type precipitates Description of ordered B2-precipitate in PH-steels Description of δ-ferrite of Cu-containing stainless steel Description of γ´ Ni3Al-type precipitate in stainless steel Crystal-structurally improved description of M6X, including Si-rich η-nitride compound Descriptions of boride precipitates Assessed Fe-Mn-Al-C peritectic for TRIP steel simulations	Description of Ni3(Al,Nb,Ti)-type η phase Description of metastable Ni3Nb-type γ´´ phase Precise partitioning ratios of elements in γ / γ´ phases Description of topologically close-packed phases (TCP phases)

Applications [1])	Thermodynamic calculations and thermokinetic simulations in AA2xxx to AA7xxx, AA7xx with Sc addition, Al-alloys containing lithium.	Thermodynamic calculations and thermokinetic simulations in -) Martensitic 9-12% Cr steel -) Hot-work tool steel -) Microalloyed steel -) PH-steel -) Austenitic stainless steel -) Cu-alloyed steel -) TRIP steel	Thermodynamic calculations and thermokinetic simulations in Ni-base superalloys -) Nimonic -) Inconel -) Waspaloy -) Up to 6th generation single-crystal
Precision	Approx. mean uncertainty range of calc. solidi, liquidi and precipitate solvi: ±30K	Approx. mean uncertainty range of calc. solidi, liquidi and precipitate solvi: ±30K	Approx. mean uncertainty range of calc. solidi, liquidi and precipitate solvi: ±20K
Recommended approx. alloying limitations [2]) for database use (wt.%) [2]) In case of doubt or special applications with deviating alloying, please contact the database developer	Al>90,Cr<5,Cu<5,Fe<5Li<5,Mg<5,Mn<5, Ni<2,Sc<5,Si<10,Sn<2,Ti<2,Zn<5,Zr<2	Al<10,B<1,C<2,Co<3,Cr<25,Cu<3,Hf<0.5, La<0.5,Mn<25,Mo<5,N<1, Nb<1,Ni<26, O<0.5,P<0.1,Pd<4, S<0.5,Si<5,Ti<0.5, V<0.5,W<3,Y<0.5	Ni>55,Al<15,B<1,C<1,Co<25,Cr<25,Cu<0.5,Fe<20,Hf<1,La<0.5, Mn<1,Mo<10,N<0.5,Nb<6, O<0.5,Re<7, Ru<7,S<0.1,Si<2,Ta<10,Ti<5,V<0.5,W<15, Y<0.1,Zr<0.5