**Table 1: Correspondence of solution nicknames & names of the FTlite 6.4 Database to the FTlite 7.1 version. (Please note that the FTlite 7.1 version contains more solutions, the extra solutions are NOT listed in the present Table).**

| Index | 6.4 Nickname | 6.4 Name | Short description | 7.1 Nickname | 7.1 Name | Short description |
|---|---|---|---|---|---|---|
| 1 | Liqu | Liquid | Liquid metal | Liqu | Liquid | Liquid metal |
| 2 | FCC | FCC_A1 | C, N, B and H interstitial | FCC | FCC_A1 | Prototype_Cu-A1 cF4 Fm-3m (225) C, N, B and H interstitial |
| 3 | HCP | HCP_A3 | | HCP | HCP_A3 | Prototype_Mg-A3 hP2 P63/mmc (194) |
| 4 | BCC | BCC_A2 | C, N and B interstitial | BCC | BCC_A2 | Prototype_W-A2 cI2 Im-3m (229) C, N and B interstitial |
| 5 | Diam | Diamond_A4 | Fd-3m structure for Si, C, Ge with dissolved Al, B, Sn, Ti, Bi, Sb, P, As and Zn. | Diam | Diamond_A4 | Prototype_C-diamond-A4 cF8 Fd-3m (227) C, Ge, alpha-Sn and Si are stable |
| 6 | DHCP | DHCP_A3’ | (prototype La, hP4) La, Ce, Pr, Nd with solubility of Gd, Sm, Dy, Y, Mg, Yb, Er and Sc | DHCP | DHCP_A3’ | Prototype_La-A3' hP4 P63/mmc (194) La, Ce, Pr, Nd, Pm |
| 7 | CBCC | CBCC_A12 | alpha-Mn | A12 | CBCC_A12 | Prototype_alpha-Mn-A12 cI58 I-43m (217) alpha-Mn, Al12Mg17, Mg24RE5 RE=Y,Tb,Dy,Ho,Er,Tm,Lu) are stable |
| 8 | CUB1 | CUB_A13 | beta-Mn | A13 | CUB_A13 | Prototype_beta-Mn-A13 cP20 P4132 (213) beta-Mn and Ag3Al are stable |
| 9 | hP12 | Laves_C14 | Prototype MgZn2:CaLi2,Mg2Ca,Mg2Sr,Mg2Ba,Mg2RE(RE = Y,Tb,Dy,Ho,Er,Tm,Yb,Lu) are stable phase | C14 | Laves_C14 | Prototype_MgZn2-C14 hP12 P63/mmc (194) CaLi2,Mg2Ca,Mg2Sr,Mg2Ba,Mg2RE(RE = Y,Tb,Dy,Ho,Er,Tm,Yb,Lu) are stable phase |
| 10 | cF24 | Laves_C15 | prototype MgCu2 : Mn2Y, Al2Ca, Al2Sc, Al2Y, Al2Ba, Mg2RE(RE = La,Ce,Pr,Nd,Sm,Gd) Al2RE (RE=La to Lu) are stable phases | C15 | Laves_C15 | Prototype_MgCu2-C15 cF24 Fd-3m (227) Mn2Y, Al2Ca, Al2Sc, Al2Y, Al2Ba, Mg2RE & Fe2RE(RE = La,Ce,Pr,Nd,Sm,Gd) Al2RE (RE=La to Lu) |
| 11 | hP24 | Laves_C36 | prototype MgNi2 | C36 | Laves_C36 | Prototype_MgNi2-C36 hP24 P63/mmc (194) (Use [l]-Option) MgNi2, Cr2Zr are stable, also in Al-Ba-Ca-Mg system |
| 12 | B32 | AlLi | dissolving Mg BCC-B32 Al-Li phase at ca. 47-55 at.% Li with solubility for Mg. Stable to 963 K. | B32 | Prototype_NaTl-B32 | cF16 Fd-3m (227) AlLi is stable |
| 13 | Beta | Beta_Al3Mg2 | dissolving Zn, Li non-stoichiometric solid solution | Beta | Beta_Al3Mg2 | Prototype_Cd2Na cubic cF1192 Fd-3m dissolving Zn, Li non-stoichiometric solid solution (prototype : Cd2Na) |

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|---|---|---|---|---|---|---|
| 14 | cI58 | Gamma_Al12Mg17 | s.s. or Mg24RE5 s.s. (prototype a-Mn, cI58), valid for Al-Mg-Zn-Li,(Mg,RE)10(Al,Mg)24(Al,Mg)24 Al-Ca-Mg-Sr, Mg-RE (RE = Y,Er,Dy,Ho,Tb,Tm,Lu with partial solubility of La,Ce,Pr,Nd,Sm,Gd) | A12 | CBCC_A12 | Prototype_alpha-Mn-A12 cI58 I-43m (217) alpha-Mn, Al12Mg17, Mg24RE5 (RE=Y,Tb,Dy,Ho,Er,Tm,Lu) are stable |
| 16 | Al5F | Al5Fe2 | Phase at ca. 71.5 at.% Al in Al-Fe. Solubility for Mn and Zn. | oC24 | Al5Fe2 | oC24 Cmcm Phase at ca. 71.5 at.% Al in Al-Fe. Solubility for Mn and Zn. |
| 17 | Al13 | Al13Fe4_'Al3Fe' | mC102 Al-rich Al-Fe phase with solubility for Mn and Zn. | Al13 | Al13Fe4_'Al3Fe' | mC102 C2/m Al-rich Al-Fe phase with solubility for Mn and Zn. |
| 18 | Al52 | Al5Fe4 | High-temperature Al-Fe phase with small range of stability (around 60 at.% Al, 1375-1505 K) and solubility for Mn. | Al52 | Al5Fe4 | High-temperature Al-Fe phase with small range of stability (around 60 at.% Al, 1375-1505 K) and solubility for Mn |
| 19 | oC28 | Al6Mn | Cmcm Al-rich phase (ca. 86 at.% Al) in the Al-Mn system with solubility for Fe. | D2h | Prototype_Al6Mn-D2h | oC28 Cmcm (63) Al-rich phase (ca. 86 at.% Al) in the Al-Mn system with solubility for Fe. |
| 20 | hR26 | Al8Mn5_D810 | R3m Al-Mn phase at 50-68 at.% Al with solubility for Cu and Fe. Stable to ca. 1463 K. | D810 | Prototype_Al8Cr5-D810 | hR26 R3m (160) Al8Mn5 |
| 21 | Al4M | Al4Mn | hP574 Phase at 80 at.% Al in Al-Mn with solubility for Fe. | Al4M | Al4Mn | hP574 P63/mmc Phase at 80 at.% Al in Al-Mn with solubility for Fe and Cr |
| 22 | aP15 | Al11Mn4 | Al-rich phase in Al-Mn with Fe solubility | aP15 | Al11Mn4 | aP15 Al-rich phase in Al-Mn with Fe solubility |
| 23 | cI26 | Al12Mn | Im3 Al-rich Al-Mn phase whith solubility for Fe | cI26 | Al12Mn | cI26 Im3 Al12Mn, Al12Mo, Al12W are stable |
| 30 | AlFe | AlFeSi_alpha | approx. stoichiometry Al7Fe2Si | Tau5 | AlFeSi_alpha | (Tau 5) Hexagonal. Looks usually like chinese script or rod-like in Al-Fe-Si alloys approx. stoichiometry Al7Fe2Si |
| 31 | AlM1 | AlMnSi_alpha | approx. stoichiometry Al9Mn2Si with solubility of Fe | AlM1 | AlMnSi_alpha | Cubic cP138 Pm-3 approx. stoichiometry Al9Mn2Si with solubility of Fe |
| 32 | AlM2 | AlMnSi_beta | Al-Mn-Si phase | AlM2 | AlMnSi_beta | Hexagonal ~Al9Mn3Si |
| 33 | AFMS | AlFeMnSi_alpha | Al-Fe-Mn-Si quaternary solution | AFMS | AlFeMnSi_alpha | Al-Fe-Mn-Si quaternary solution |
| 34 | Tau5 | Tau5 | Al3Fe(Al,Si) also called gamma | Tau2 | AlFeSi_gamma | (Tau 2) Monoclinic approx. stoichiometry Al3FeSi |
| 35 | Phi | Phi | Phase in the Al-Mg-Zn system with stoichiometry (Mg)6(Al,Zn)5 with solubility for Cu. | Phi | Phi | Phase in the Al-Mg-Zn system with stoichiometry (Mg)6(Al,Zn)5 with solubility for Cu. |

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|---|---|---|---|---|---|---|
| 36 | MgZn | MgZn | real stoich. Mg12Zn13 Mg-Zn phase at ca. 50 at.% Zn with solubility for Al and Cu. Stable to ca. 620 K. | MgZn | Mg12Zn13 | Mg-Zn phase at ca. 50 at.% Zn with solubility for Al and Cu. Stable to ca. 620 K. |
| 37 | cP39 | Mg2Zn11 | cP39-Pm3 V_phase | D22 | Prototype_Mg2Zn11-D22 | cP39 Pm-3 (200) V_phase: Mg2Zn11 and Mg2Cu6Al5 are stable compounds |
| 38 | mC11 | Mg2Zn3 | mC110-B2/m Mg-Zn phase at ca. 60 at.% Zn with solubility for Al and Cu. Stable to 689 K. | mC11 | Mg2Zn3 | mC110 B2/m Mg-Zn phase at ca. 60 at.% Zn with solubility for Al and Cu. Stable to 689 K. |
| 39 | Tau1 | AlMgZn_Tau | cI162 Al-Mg-Zn phase with stoichiometry (Mg)26(Al,Mg)6(Al,Mg,Zn,Cu)48(Al)1 | D8e | Prototype_Mg32(Al,Zn)49-D8e | T-Phase cI162 Im-3 Al-Mg-Zn-Cu-Ag phase with stoichiometry (Mg)26(Al,Mg)6(Al,Mg,Zn,Cu,Ag)48(Al)1 |
| 40 | HCP2 | HCP_Zn | Solid solution based on Zn with solubility for Al, Cr, Cu, Fe, Li, Mg, Si and Sn., | HCP2 | HCP_Zn | Prototype_Mg-A3 hP2 P63/mmc (194) Higher c/a ratio than Mg-HCP_A3 |
| 41 | Dlta | AlCu_Delta | Al2Cu3 Al-Cu phase containing 60 at.% Cu in Al-Cu with solubility for Zn. Stable to ca. 1233 K. | Dlta | AlCu_delta | Al2Cu3 hR* R-3m delta-Al2Cu3 phase containing 60 at.% Cu in Al-Cu with solubility for Zn. Stable to ca. 1233 K. |
| 42 | Epsl | AlCu_Epsilon | High-temperature Al-Cu phase at ca. 55 at.% Cu with solubility for Zn. Stable between ca. 873 and 1123 K. | B81 | Prototype_NiAs-B81 | hP4 P63/mmc (194) epsilon-AlCu and NiBi are stable |
| 43 | Eta_ | AlCu_Eta | Al-Cu phase at ca. 50 at.% Cu with solubility for Zn. Stable to ca. 923 K. | EtaL | AlCu_eta-LT | mC20 C2/m Al-Cu phase at ca. 50 at.% Cu with solubility for Zn. Stable below 560oC |
| 44 | Zeta | AlCu_Zeta | Al9Cu11 Al-Cu phase at ca. 55 at.% Cu with solubility for Zn. Stable to ca. 863 K. | Zeta | AlCu_zeta | Al9Cu11 zeta_Al9Cu11 phase at ca. 55 at.% Cu with solubility for Zn. Stable to ca. 863 K. |
| 45 | Thta | Al2Cu_Theta | Stable to ca. 873 K. Important in commercial Al-alloys. | C16 | Prototype_Al2Cu-C16 | tI12 I4/mcm (140) theta-Al2Cu, Fe2B, W2B, Zr2Fe, Zr2Si and Zr2Ni are stable. |
| 46 | Gam4 | CuZn_Gamma | Phase exists between ca. 30 & 43 at.% Cu with solubility for Mg. Stable to ca. 1123 K. Alternative description Gamma-Lia | Gam4 | CuZn_gamma | Phase exists between ca. 30 & 43 at.% Cu with solubility for Mg. Stable to ca. 1123 K. Alternative description Gamma-Lia |
| 47 | D83 | Gamma_D83 | Al4Cu9 Al-Cu phase at ca. 62-69 at.% Cu with solubility for Mn. Stable to ca. 1153 K. | D83 | Prototype_Cu9Al4-D83 | cP52 P-43m (215) Cu9Al4 and InAg2 are stable |
| 48 | Gam5 | Gamma_H | High-temperature Al-Cu phase at 62-69 at.% Cu with solubility for Zn. Stable between ca. 1073 and 1273 K. | Gam5 | AlCu_gamma-HT | High-temperature Al-Cu phase at 62-69 at.% Cu with solubility for Zn. Stable between ca. 1073 and 1273 K |
| 49 | Tau2 | AlCuZn_Tau | Al-Cu-Zn phase | Tau_ | AlCuZn_Tau | Rhombohedral Al4Cu3Zn phase |
| 59 | B2__ | BCC_B2 | (prototype CsCl, cP2) MgRE (RE=Ce,Dy,Er,Eu,Gd,Ho,La,Nd,Pr,Sm,Tb,Tm,Y), MgSc, AlSc, CeZn, YZn are also stable | B2 | BCC_B2 | Prototype_CsCl-B2 cP2 Pm-3m (221) MgRE and ZnRE (RE=Ce,Dy,Er,Eu,Gd,Ho,La,Nd,Pr,Sm,Tb,Tm,Y), MgSc and AlSc are stable |

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|---|---|---|---|---|---|---|
| 61 | tI26 | Mg12RE | solid solution (tI26) {Mg,(Al)}12[Ce,La,Pr,(RE)] with limited solid solubility of Al and RE | D2b | Prototype_Mn12Th-D2b | tI26 I4/mmm (139) Mg12RE, Mn12RE, Zn12RE, Al8Cr4RE |
| 62 | cF116 | Mn23N6 | solid solution (prototype Mn23Th6, cF116) [I] Mn23Y6 with limited solubility of Mg and Ce, Mg23Sr6 with limited solubility of Al and Ca. | D8a | Prototype_Mn23Th6-D8a | cF116 Fm-3m (225) Mn23RE6 with limited solubility of Mg, Gd and Ce, (Mg,Li)23Sr6 with solubility of Al and Ca. |
| 70 | aP22 | Al3Ca8 | dissolving Mg Limited solid solution | aP22 | Al3Ca8 | dissolving Mg aP22 P-1 Limited solid solution |
| 71 | AB2 | A(B)2 | (Ca,Sr)[Al,Si]2 ordered ternary solid solution (not present in Ca-Al and Ca-Si subsystems) | AB2 | A(B)2 | (Ca,Sr)[Al,Si]2 ordered ternary solid solution (not present in Ca-Al and Ca-Si subsystems) |
| 72 | hR18 | CaSi2 | dissolving CaAl2 hR18-R(3)m structure - terminal solid solution | C12 | Prototype_CaSi2-C12 | hR6 R-3m (166) dissolving CaAl2 |
| 73 | D13 | D13 | (Al,Mg)4(Ca,Sr,Ba) tI10-I4/mmm solid solution | D13 | Prototype_Al4Ba-D13 | tI10 I4/mmm (139) (Al,Mg)4(Ca,Sr,Ba,Eu) |
| 74 | CMS | CaMgSi | (excess Ca2Si) | CMS | CaMgSi | (excess Ca2Si) |
| 80 | CrSi | CrSi2 | C54 oF24 Fddd orthorhombic Cr-Si binary phase at ca. 67 at.% Si. Phase stable to ca. 1743 K. | C40 | Prototype_CrSi2-C40 | hP9 P6222 (180) |
| 81 | D88_ | D88_M5Si3 | Ti-Si binary phase | D88 | Prototype_Mn5Si3-D88 | hP16 P63/mcm (193) (Si,Ti)3(Ti,Mn,RE)3(Ti,Mn,RE)2(Va,Si)1 |
| 90 | B2M | B2M | TiB2 prototype : AlB2, ZrB2, HfB2 hP3-P6/mmm solid solution Possible miscibility gap | C32 | Prototype_AlB2-C32 | hP3 P6/mmm (191) AlB2, CrB2, HfB2, MgB2, TiB2 & ZrB2 are stable |
| 91 | BM | BM | FeB prototype: TiB, ZrB, HfB oP8-Pnma solid solution | B27 | Prototype_FeB-B27 | oP8 Pnma (62) TiB, ZrB, HfB, TiSi, ZrSi and RESi (RE=La,Ce,Pr,Nd,Pm,Sm,Eu,Gd,Tb,Dy,Ho,Er,Tm,Yb,Lu) |
| 92 | B4C | B4C | non-stoichiometric | D1g | Prototype_B4C-D1g | hR15 R-3m |
| 93 | B3Si | B3Si | B-Si binary phase at ca. 75 at.% B. Stable to ca. 1548 K. | B3Si | B3Si | Rhombohedral B-Si binary phase at ca. 75 at.% B. Stable to ca. 1548 K. |
| 94 | B4M3 | (Ti,Hf)3B4 | B-Ti phase at ca. 57 at.% B, stable to 2473 K. Solubility for Hf. | D7b | Prototype_Ta3B4-D7b | oI14 Immm (71) (Ti,Hf)3B4 |
| 95 | B6Si | B6Si | B-Si phase at ca. 86 at.% B. Stable to ca. 2113 K. | B6Si | B6Si | orthorhombic Pnnm (Si43B238) B-Si phase at ca. 86 at.% B. Stable to ca. 2113 K. |
| 96 | BetB | Beta_Rhombo_B | Solid solution based on B with solubility for C and Si. | Ag | Prototype_beta-B-Ag | tP50 P42/nnm (134) Beta-Rhombohedral Boron (with solubility for C and Si) |

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| 97 | B_nS | B_nSi | B-Si binary phase between ca. 94 to 99 at.% B. Stable to ca. 2298 K. | B_nS | B_nSI | B-Si binary phase between ca. 94 to 99 at.% B. Stable to ca. 2298 K |
| 98 | Grap | Graphite | with boron in solution | A9 | Graphite_A9 | Prototype_C-graphite-A9 hP4 P63/mmc (194) |
| 99 | Al4C | Al4C3 | Solid aluminum carbide dissolving SiC | D71 | Prototype_Al4C3-D71 | hR7 R-3m (166) Solid aluminum carbide dissolving SiC |
| 111 | Li2Z | Zn3Li2 | High-temperature allotropic form of low-temperature stoichiometric Zn3Li2 | Li2Z | Zn3Li2 | P-3m (164) High-temperature allotropic form of low-temperature stoichiometric Zn3Li2 |
| 112 | ZnS | Zincblende | III-V solid solution (Al,Ga,In)[P,As,Sb] | B3 | Zincblende_B3 | Prototype_ZnS-B3 cF8 F-43m (216) (Al,Ga,In)[P,As,Sb] |
| 150 | D022 | Al3M_D022 | Phase at ca. 75 at.% Al in Al- Cr, Mo, Nb, Ta, Ti, V, Zr | D022 | Prototype_TiAl3-D022 | tI8 I4/mmm (139) Al3M composition |
| 152 | D019 | AlM_D019 | Al-Ti phase (ca. 60 to 78 at.% Ti) with solubility for Mo, Nb, Ta, V and W. | D019 | Prototype_Ni3Sn-D019 | hP8 P63/mmc (194) La3Al, Ce3Al, Pr3Al and Nd3Al are stable Ti3Al, Zr3Al, Mo3Al, Nb3Al, Ta3Al, Al3Y, Al3La, Al3Ce, Al3Pr, Al3Nd, Al3Sm and Al3Gd are stable |
| 153 | AlTi | AlTi | Al-Ti phase (ca. 38 to 52 at.% Ti) with solubility for Cr, Mo, Nb, Ta, V and W. | L10 | Prototype_AuCu-L10 | tP2 P4/mmm (123) AlTi with solubility for Cr |
| 155 | IMYZ | I_Mg3YZn6 | Fm53 | Fm53 | I_REZn6Mg3 | Fm53 Icosahedral |
| 157 | WMYZ | W_MgYZn3 | cF16, Fm3m | | | REMOVED (evaluated not stable) |
| 160 | M3C2 | Mg3Ce2Zn3 | | M3C2 | Mg3Ce2Zn3 | |
| 164 | oP16 | Pnma | prototype AlEr oP16 AlPr, AlNd, AlSm, AlGd, AlTb, AlDy, AlHo and AlEr are stable phases. | oP16 | Prototype_AlEr | oP16 Pmma AlPr, AlNd, AlSm, AlGd, AlTb, AlDy, AlHo and AlEr are stable phases |
| 165 | oC16 | Cmcm | prototype AlCe oC16 AlLa and AlCe are stable phases | oC16 | Prototype_AlCe | oC16 Cmcm AlLa and AlCe are stable phases |
| 166 | hR3 | Sm | rhombohedral hR3 R-3m Prototype is Sm | C19 | Prototype_alpha-Sm-C19 | rhombohedral hR3 R-3m (166) |
| 413 | BCT | BCT_A5 | tI4 | A5 | BCT_A5 | Prototype_beta-Sn-A5 tI4 I41/amd (141) |
| 415 | Cr3S | Cr3Si_A15 | Ti3Al phase with Al, Nb and Ti up to Nb3Al | A15 | CUB_A15 | Prototype_Cr3Si-A15 cP8 Pm-3n (223) Phase of composition A3B formed between (Cr,Mo,Nb,Si,Ti,V)3(Al,Cr,Si,Nb,V) |
| 417 | Cu6Y | Cu6Y | Cu-Y binary phase at ca. 86 at.% Cu. Stable to ca. 1183 K. | Cu7Y | Prototype_TbCu7 | hP8 P6/mmm Cu6Y phase. Cu-Y binary phase at ca. 86 at.% Cu. Stable to ca. 1183 K |
| 418 | CUB2 | CUB_A15 | Phase of composition A3B formed between (Cr,Mo,Si,Ti)3(Al,Cr,Si). | A15 | CUB_A15 | Prototype_Cr3Si-A15 cP8 Pm-3n (223) Phase of composition A3B formed between (Cr,Mo,Nb,Si,Ti,V)3(Al,Cr,Si,Nb,V) |

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|---|---|---|---|---|---|---|
| 420 | HSig | High_Sigma | A sigma variant formed between Cr, Mo and Mn. | HSig | High_Sigma | A sigma variant formed between Cr and Mn. |
| 421 | Lav1 | C14-Laves | hP12<br>Cr2Ti, Cr2Zr, Fe2Ti, Mn2Ti, Al2Zr | C14 | Laves_C14 | Prototype_MgZn2-C14 hP12 P63/mmc (194) CaLi2,Mg2Ca,Mg2Sr,Mg2Ba,Mg2RE(RE = Y,Tb,Dy,Ho,Er,Tm,Yb,Lu) are stable phase |
| 422 | Lav2 | C15-Laves | cF24 phase with A2B stoichiometry<br>Cr2Ti, Cr2Zr, Fe2Zr | C15 | Laves_C15 | Prototype_MgCu2-C15 cF24 Fd-3m (227) Mn2Y, Al2Ca, Al2Sc, Al2Y, Al2Ba, Mg2RE & Fe2RE(RE = La,Ce,Pr,Nd,Sm,Gd) Al2RE (RE=La to Lu) |
| 424 | FZr2 | FeZr2 | | C16 | Prototype_Al2Cu-C16 | tI12 I4/mcm (140) theta-Al2Cu, Fe2B, W2B, Zr2Fe, Zr2Si and Zr2Ni are stable. |
| 425 | FZr3 | FeZr3 | | E1a | Prototype_FeZr3-E1a | oC16 Cmcm |
| 427 | Sigm | Sigma | Can form slowly in high Cr,(Mo,V)-steels at lower temperatures. | D8b | Prototype_FeCr-D8b | tP30 P42/mnm (136) Sigma-FeCr, also intermetallic in Al-Nb-Ta and Mn-Ni-V |
| 428 | SiV3 | SiV3 | Si-V binary phase at ca. 75-80 at.% V. Stable to ca. 2192 K. | A15 | CUB_A15 | Prototype_Cr3Si-A15 cP8 Pm-3n (223) Phase of composition A3B formed between (Cr,Mo,Nb,Si,Ti,V)3(Al,Cr,Si,Nb,V) |
| 429 | SnTi | SnTi3 | Sn-Ti binary phase at 75 at.% Ti. Stable to 1943 K. | SnTi | Prototype_Ni3Sn-D019b | (194) SnTi3. Stable to 1943 K. |
| 430 | AlMo | AlMo~2 | High-temperature binary Al-Mo phase between ca. 48-54 at.% Mo. Stable from 1743 to 1993 K. | AlMo | AlMo~2 | High-temperature binary Al-Mo phase between ca. 48-54 at.% Mo. Stable from 1743 to 1993 K. |
| 433 | Gam3 | Gamma_DO3 | High-temperature Cu-rich binary phase in Cu-Sn, approx. 16-28 at.% Sn. Stable from 793 to 1028 K. | D03 | Prototype_BiF3-D03 | cF16 Fm-3m (L21) (225) M3RE (M = Mg,Zn, RE = Ce,La,Pr,Nd,Sm,Gd,Tb,Dy,Lu,Tm), gamma-Cu3Sn |
| 437 | W2B5 | W2B5 | Phase with narrow range of stoichiometry around 69 at.% B. Stable to ca. 2638 K. | D8h | Prototype_B2W-D8h | hP12 P63/mmc (194) Also called W2B5 |
| 438 | WB_1 | WB_Alpha | Low-temperature form of WB. Stable to ca. 2443 K. | Bg | Prototype_MoB-Bg | tI16 I41/amd (141) tetragonal MoB and alpha-WB are stable |
| 439 | WB_2 | WB_Beta | High-temp. form of WB with small stoichiometric range. Stable to ca. 2938 K. | B33 | Prototype_CrB-B33 | oC8 Cmcm (63) CrB, WB, CaSi, SrSi, BaSi, CaSn, SrSn, AlY, RESi (RE=Sc,Y) are stable |
| 440 | Cu4T | Cu4Ti | Cu-Ti binary phase with small range of stoichiometry. Stable to 1158 K. | oP20 | Cu4Ti | oP20 Pnma Prototype_ZrAu4 Cu-Ti binary phase with small range of stoichiometry. Stable to 1158 K |
| 441 | CuTi | CuTi | Cu-Ti binary phase with small range of stoichiometry. Stable to ca. 1255 K. | B11 | Prototype_CuTi-B11 | tP4 P4/nmm (129) gamma-CuTi |

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| 442 | NiMo | NiMo | Mo-Ni binary phase at ca. 42-53 at.% Ni. Stable to ca. 1665 K. | NiMo | NiMo | Mo-Ni binary phase at ca. 42-53 at.% Ni. Stable to ca. 1665 K. |
| 443 | L12_ | L12_FCC!FCC_A1 | (Al,Ni,Fe,Si)3(Al,Ni,Fe,Si)1 Ordered FCC phase in Al-Ni, Fe-Ni and Ni-Si. | L12c | L12_FCC!FCC_A1 | (Al,Ni,Fe,Si)3(Al,Ni,Fe,Si)1 (221) Ordered FCC phase in Al-Ni, Fe-Ni and Ni-Si. |
| 444 | Teta | Teta | High-temperature Ni-Si binary phase at 33-40 at.% Si, stable between ca. 1097 to 1565 K. | Teta | Ni2Si | High-temperature Ni-Si binary phase at 33-40 at.% Si, stable between ca. 1097 to 1565 K. |
| 445 | NiT1 | NiTa | Ni-Ta binary phase at ca. 50-54 at.% Ta. Stable to ca. 1831 K. | NiT1 | NiTa | Ni-Ta binary phase at ca. 50-54 at.% Ta. Stable to ca. 1831 K. |
| 446 | NiT2 | NiTa2 | Ni-Ta binary phase at ca. 66-70 at.% Ta. Stable to ca. 2059 K. | NiT2 | NiTa2 | Ni-Ta binary phase at ca. 66-70 at.% Ta. Stable to ca. 2059 K. |
| 447 | Ni3M | Ni3MoTa | Phase at ca. 75 at.% Ni, exists in Mo-Ni and Ni-Ta. | Ni3M | Ni3MoTa | Phase at ca. 75 at.% Ni, exists in Mo-Ni and Ni-Ta. |
| 448 | TiNi | TiNi | Equiatomic Ni-Ti phase with ca. 10 at.% range. Stable to ca. 1573 K. | B2_b | BCC_B2b | Prototype_CsCl-B2 cP2 Pm-3m (221) Equiatomic Ni-Ti phase with ca. 10 at.% range. Stable to ca. 1573 K. |
| 449 | Ni3Z | Ni3Zr | Ni-Zr binary phase at ca. 35 at.% Zr with small range of homogeneity. Stable to 1196 K. | D019 | Prototype_Ni3Sn-D019 | hP8 P63/mmc (194) La3Al, Ce3Al, Pr3Al and Nd3Al are stable Ti3Al, Zr3Al, Mo3Al, Nb3Al, Ta3Al, Al3Y, Al3La, Al3Ce, Al3Pr, Al3Nd, Al3Sm and Al3Gd are stable |
| 450 | Ni5Z | Ni5Zr | Ni-Zr binary phase, stoichiometric range ca. 14-16 at.% Zr. Stable to ca. 1590 K | C15c | Laves_C15c | cF24 F-43m (227) Ni5Zr Stable to ca. 1590 K |
| 451 | Ni10 | Ni10Zr7 | Ni-Zr binary phase, stoichiometric range ca. 40-42 at.% Zr. Stable to ca. 1562 K. | Ni10 | Ni10Zr7 | Ni-Zr binary phase, stoichiometric range ca. 40-42 at.% Zr. Stable to ca. 1562 K. |
| 452 | A3Ni | Al3Ni2 | Al-Ni phase at ca. 60-65 at.% Al. Stable to 1406 K | D513 | Prototype_Al3Ni2-D513 | hP5 P-3m1 (164) Al-Ni phase at ca. 60-65 at.% Al. Stable to 1406 K |
| 453 | Mn2Z | Mn2Zr | Mn-Zr phase at 67-72 at.% Mn. Stable to 1723 K. | C14 | Laves_C14 | Prototype_MgZn2-C14 hP12 P63/mmc (194) Al2Zr,CaLi2,Cr2(Ti,Zr),Fe2Sc,Fe2Ti,Mg2(Ca,Sr,Ba),Mg2RE(RE = Y,Tb,Dy,Ho,Er,Tm,Yb,Lu) are stable phase |
| 455 | D82 | D82_FeZn_Gamma | Fe-Zn binary phase at ca. 67-80 at. % Zn. Stable to ca. 1053 K. | D81 | Prototype_Cu5Zn8-D81 | cI52 I-43m (217) Fe-Zn gamma phase at ca. 67-80 at. % Zn. Stable to ca. 1053 K. |
| 456 | FeZ1 | FeZn4 | Fe-Zn binary phase at ca. 74-78 at.% Zn. Stable to ca. 820 K. | FeZ1 | FeZn4 | Fe-Zn binary phase at ca. 74-78 at.% Zn. Stable to ca. 820 K. |
| 457 | FeZ2 | FeZn_Delta | Fe-Zn binary phase at ca. 86-89 at.% Zn. Stable to ca. 943 K. | FeZ2 | FeZn_delta | delta_FeZn7 binary phase at ca. 86-89 at.% Zn. Stable to ca. 943 K. |

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|---|---|---|---|---|---|---|
| 458 | FeZ3 | FeZn_Zeta | Fe-Zn binary phase at ca. 93-94 at.% Zn. Stable to ca. 807 K. | FeZ3 | FeZn_zeta | monoclinic C2/m FeZn13 binary phase at ca. 93-94 at.% Zn. Stable to ca. 807 K. |
| 460 | AlNi | AlNi | BCC-B2 Ordered BCC phase in Al-Ni. | B2_c | BCC_B2c | Prototype_CsCl-B2 cP2 Pm-3m (221) Ordered BCC phase in Al-Ni. |
| 462 | hP94 | M38N9 | prototype Mg38Sr9 : Mg38Sr9 is stable phase. hP94 : (Mg,Al)38{Sr,Ca}9 | hP94 | Prototype_Mg38Sr9 | hP94 (Mg,Al)38{Sr,Ca}9 |
| 463 | oI12 | Al2N1 | prototype CeCu2: Al2Sr is stable phase. oI12 : (Al,Mg)2{Sr,Ca}1 | C42 | Prototype_CeCu2-C42 | oI12 Imma (72) Al2Sr and REZn2 are stable phases (Al,Mg,Zn,Cu,Ag)2{Ca,Sr,Ba} and (Mg,Zn)2{Ce,Dy,Eu,Er,Gd,Ho,La,Lu,Nd,Pm,Pr,Sc,Sm,Tb,Tm,Y,Yb} |
| 464 | cP64 | (Al7Sr8) | cP64 (Al)7{Sr,Ca}1 | cP64 | Al7Sr8 | cP64 (Al)7{Sr,Ca}1 |
| 467 | P3m1 | alpha_Mg3X2(low-T) | P-3m1 solid solution (Mg)3[Mg,Va]1{Bi,Sb,As}2 | P3m1 | alpha_Mg3X2(low-T) | P-3m1 solid solution (Mg)3[Mg,Va]1{Bi,Sb,As}2 |
| 468 | Ia3 | beta_Mg3Y2(high-T) | Ia3 solid solution (Mg)3[Mg,Va]1{Bi,Sb,As}2 | Ia3 | beta_Mg3X2(high-T) | Ia3 solid solution (Mg)3[Mg,Va]1{Bi,Sb,As}2 |
| 469 | Mg2Q | Mg2X | Fm3m solid solution Mg2Pb-Mg2Ge | C1 | Prototype_CaF2-C1 | cF12 Fm-3m (225) fluorite & antifluorite structure Mg2Si, Mg2Sn, Mg2Ge, Mg2Pb, NiSi2 are stable |
| 470 | Mg2X | Mg2X | solid solution: Mg2Sn-Mg2Si-Mg3Sb2(high-T, beta) complete solid solution over 800C. Fm3m. | C1 | Prototype_CaF2-C1 | cF12 Fm-3m (225) fluorite & antifluorite structure Mg2Si, Mg2Sn, Mg2Ge, Mg2Pb, NiSi2 are stable |
| 471 | Mg3X | Mg3Sb2(low-T, | Mg3Sb2(low-T, alpha) + Mg2Si, Mg2Sn | Mg3X | Mg3Sb2(low-T, | Mg3Sb2(low-T, alpha) + Mg2Si, Mg2Sn |
| 472 | prB2 | pre-B'' | 'FCC monoclinic' C2/m (METASTABLE PHASE) | prB2 | pre-B'' | 'FCC monoclinic' C2/m (METASTABLE PHASE) |
| 473 | B'' | B'' | 'non-FCC monoclinic' C2/m (METASTABLE PHASE) | B'' | B'' | 'non-FCC monoclinic' C2/m (METASTABLE PHASE) |
| 474 | Pnma | U2 | Mg4SixAly Orthorhombic Pnma (METASTABLE PHASE) | Pnma | U2 | Mg4SixAly Orthorhombic Pnma (METASTABLE PHASE) |
| 475 | P_6 | B' | Mg9Si7Al3(Va,Al,Si,Mg,Cu) Hexagonal P_6 (METASTABLE PHASE) | P_6 | B' | Mg9Si7Al3(Va,Al,Si,Mg,Cu) Hexagonal P_6 (METASTABLE PHASE) |
| 476 | IM1 | P63/mmc | (194) {Ca}[Mg](Mg,Zn)4 IM1 | IM1 | IM1-CaMgZn | P63/mmc (194) {Ca}[Mg,Zn](Mg,Zn)4 hP36 |
| 477 | tp40 | Al7CuX2 | P4/mnc tP40 Al7Cu(Mn,Fe)2 prototype Al7CuMn2 | E9a | Prototype_Al7Cu2Fe-E9a | tP40 P4/mnc (128) Al7Cu(Cu,Fe,Mn)1(Mn,Fe)1 Al7Cu2Fe and Al7CuMn2 are stable |
| 503 | D023 | Al3M_D023 | Phase at ca. 75 at.% Al in Al- Zr, with soluble Ti, Cr, V | D023 | Prototype_ZrAl3-D023 | tI16 I4/mmm (139) Al3Zr and Al3Hf(HT) with soluble Ti, Cr, V |
| 504 | L12o | Al3M_L12 | AuCu3 structure | L12 | Prototype_AuCu3-L12 | cP4 Pm-3m (221) Al3X |

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|---|---|---|---|---|---|---|
| 505 | L12b | AuCu3-L12 | AlRE3 structure | L12b | Prototype_AuCu3-L12b | cP4 Pm-3m (221)<br>AlX3 |
| 506 | hR60 | hR60 | HoAl3 structure | hR60 | Prototype_HoAl3 | hR60 Al3Ho and Al3Dy are stable end-members |
| 507 | oP12 | Co2Si | Co2Si Prototype AlRE2 solution | C23 | Prototype_Co2Si-C23 | oP12 Pnma (62) AlRE2 (RE=Pr,Nd,Sm,Gd,Tb,Dy,Ho,Er), CuCa2, SnCa2, SnSr2, Sr2Si, Ca2Si, Ni2Si are stable |
| 508 | hP8 | Ni3Sn(Al3RE) | phase (prototype Ni3Sn, hP8) Al3Y, Al3La, Al3Ce, Al3Pr, Al3Nd, Al3Sm and Al3Gd are stable phases. | D019 | Prototype_Ni3Sn-D019 | hP8 P63/mmc (194) La3Al, Ce3Al, Pr3Al and Nd3Al are stable Ti3Al, Zr3Al, Mo3Al, Nb3Al, Ta3Al, Al3Y, Al3La, Al3Ce, Al3Pr, Al3Nd, Al3Sm and Al3Gd are stable |
| 509 | hp8_ | Ni3Sn(AlRE3) | prototype for Al(La,Ce,Pr,Nd)3 AlLa3, AlCe3, AlPr3 and AlNd3 are stable phases. | D019 | Prototype_Ni3Sn-D019 | hP8 P63/mmc (194) La3Al, Ce3Al, Pr3Al and Nd3Al are stable Ti3Al, Zr3Al, Mo3Al, Nb3Al, Ta3Al, Al3Y, Al3La, Al3Ce, Al3Pr, Al3Nd, Al3Sm and Al3Gd are stable |
| 510 | tP20 | Zr3Al2 | Zr3Al2 prototype (Al,Mg)2(RE)3 P42/mnm | tP20 | Prototype_Al2Zr3 | (Al,Mg)2(RE)3 tP20 P42/mnm<br>Al2Zr3, Al2RE3 (RE=Y,Gd,Tb,Dy,Ho,Er,Tm,Lu) |
| 511 | tI92 | Mg41RE5 | (RE = La,Ce,Pr,Nd,Sm) solid solution (tI92, prototype Mg41Ce5) I4/m | tI92 | Prototype_Mg41Ce5 | Mg41RE5 (RE = La,Ce,Pr,Nd,Sm) tI92<br>I4/m |
| 512 | hP38 | M17N2 | prototype Ni17Th2 hP38: Mg17Ce2, Mg17Sr2, Mg17La2 and Mg17Eu are stable phase.<br>hP38 : (Mg,Al)17{Ce,Sr,Ca,La,Eu}2 | hP38 | Prototype_Ni17Th2 | hP38 P63/mmc (Mg,Zn,Al,Fe)17{RE,Sr,Ca}2:<br>Mg17Ce2, Mg17Sr2, Mg17La2, Mg17Eu, Zn17RE2 stable |
| 513 | cF16 | Mg3RE | (RE = Ce,La,Pr,Nd,Sm,Gd,Tb,Dy) solid solution (cF16, prototype BiF3) with limited solublity of Mg and Y | D03 | Prototype_BiF3-D03 | cF16 Fm-3m (L21) (225) M3RE (M = Mg,Zn, RE = Ce,La,Pr,Nd,Sm,Gd,Tb,Dy,Lu,Tm), gamma-Cu3Sn |
| 514 | cF44 | Mg5RE | (RE = Sm,Gd) solid solution (cF448, prototype Mg5Gd) Mg5Sm and Mg5Gd are stable phases. | cF44 | Prototype_Mg5Gd | Mg5RE (RE = Sm,Gd) solid solution cF448<br>Mg5Sm and Mg5Gd are stable phases. |
| 515 | oI28 | alpha-Al11RE3 | phase (low-T stable form) (prototype a-Al11La3, oI28, Immm) Al11La3, Al11Ce3, Al11Pr3 and Al11Nd3 are stable phases. | oI28 | Prototype_Al11La3 | oI28 Immm (low-T stable form)<br>Al11La3, Al11Ce3, Al11Pr3, Al11Nd3 and several Zn11RE3 are stable phases |
| 516 | tI10 | beta-Al11RE3 | phase (high-T stable form) (prototype: Al4Ba, tI10, I4/mmc) Al11La3, Al11Ce3, Al11Pr3, Al11Nd3 and Al11Sm3 are stable phases. | D13b | Prototype_Al4Ba-D13b | Al11RE3 tI10 I4/mmc (139) Al11La3, Al11Ce3, Al11Pr3, Al11Nd3 and Al11Sm3 are stable phases. |
| 517 | E | E-phase | cF184 Al18Mg3(Cr,Mn,Mo,Ti,Ta,V)2<br>Prototype Al18Cr2Mg3 Fd-3m | E | Prototype_CeCr2Al20 | cF184 Fd3m (no. 227)<br>Zn22Zr, CeCr2Al20, Mg3Cr2Al18 (E-phase) |

**Table 2: Shorter version of Table 1 (ordered).**

| 6.4 Nickname | 6.4 Name | 7.1 Nickname | 7.1 Name |
|---|---|---|---|
| Liqu | Liquid | Liqu | Liquid |
| FCC | FCC_A1 | FCC | FCC_A1 |
| HCP | HCP_A3 | HCP | HCP_A3 |
| BCC | BCC_A2 | BCC | BCC_A2 |
| Diam | Diamond_A4 | Diam | Diamond_A4 |
| DHCP | DHCP_A3’ | DHCP | DHCP_A3’ |
| CBCC | CBCC_A12 | A12 | CBCC_A12 |
| CUB1 | CUB_A13 | A13 | CUB_A13 |
| hP12 | Laves_C14 | C14 | Laves_C14 |
| cF24 | Laves_C15 | C15 | Laves_C15 |
| hP24 | Laves_C36 | C36 | Laves_C36 |
| B32 | AlLi | B32 | Prototype_NaTl-B32 |
| Beta | Beta_Al3Mg2 | Beta | Beta_Al3Mg2 |
| cI58 | Gamma_Al12Mg17 | A12 | CBCC_A12 |
| Al5F | Al5Fe2 | oC24 | Al5Fe2 |
| Al13 | Al13Fe4_’Al3Fe’ | Al13 | Al13Fe4_'Al3Fe' |
| Al52 | Al5Fe4 | Al52 | Al5Fe4 |
| oC28 | Al6Mn | D2h | Prototype_Al6Mn-D2h |
| hR26 | Al8Mn5_D810 | D810 | Prototype_Al8Cr5-D810 |
| Al4M | Al4Mn | Al4M | Al4Mn |
| aP15 | Al11Mn4 | aP15 | Al11Mn4 |
| cI26 | Al12Mn | cI26 | Al12Mn |
| AlFe | AlFeSi_alpha | Tau5 | AlFeSi_alpha |
| AlM1 | AlMnSi_alpha | AlM1 | AlMnSi_alpha |
| AlM2 | AlMnSi_beta | AlM2 | AlMnSi_beta |
| AFMS | AlFeMnSi_alpha | AFMS | AlFeMnSi_alpha |
| Tau5 | Tau5 | Tau2 | AlFeSi_gamma |
| Phi | Phi | Phi | Phi |
| MgZn | MgZn | MgZn | Mg12Zn13 |
| cP39 | Mg2Zn11 | D22 | Prototype_Mg2Zn11-D22 |
| mC11 | Mg2Zn3 | mC11 | Mg2Zn3 |
| Tau1 | AlMgZn_Tau | D8e | Prototype_Mg32(Al,Zn)49-D8e |

| HCP2 | HCP_Zn | HCP2 | HCP_Zn |
|---|---|---|---|
| Dlta | AlCu_Delta | Dlta | AlCu_delta |
| Epsl | AlCu_Epsilon | B81 | Prototype_NiAs-B81 |
| Eta_ | AlCu_Eta | EtaL | AlCu_eta-LT |
| Zeta | AlCu_Zeta | Zeta | AlCu_zeta |
| Thta | Al2Cu_Theta | C16 | Prototype_Al2Cu-C16 |
| Gam4 | CuZn_Gamma | Gam4 | CuZn_gamma |
| D83 | Gamma_D83 | D83 | Prototype_Cu9Al4-D83 |
| Gam5 | Gamma_H | Gam5 | AlCu_gamma-HT |
| Tau2 | AlCuZn_Tau | Tau_ | AlCuZn_Tau |
| B2__ | BCC_B2 | B2 | BCC_B2 |
| tI26 | Mg12RE | D2b | Prototype_Mn12Th-D2b |
| cF116 | Mn23N6 | D8a | Prototype_Mn23Th6-D8a |
| aP22 | Al3Ca8 | aP22 | Al3Ca8 |
| AB2 | A(B)2 | AB2 | A(B)2 |
| hR18 | CaSi2 | C12 | Prototype_CaSi2-C12 |
| D13 | D13 | D13 | Prototype_Al4Ba-D13 |
| CMS | CaMgSi | CMS | CaMgSi |
| CrSi | CrSi2 | C40 | Prototype_CrSi2-C40 |
| D88_ | D88_M5Si3 | D88 | Prototype_Mn5Si3-D88 |
| B2M | B2M | C32 | Prototype_AlB2-C32 |
| BM | BM | B27 | Prototype_FeB-B27 |
| B4C | B4C | D1g | Prototype_B4C-D1g |
| B3Si | B3Si | B3Si | B3Si |
| B4M3 | (Ti,Hf)3B4 | D7b | Prototype_Ta3B4-D7b |
| B6Si | B6Si | B6Si | B6Si |
| BetB | Beta_Rhombo_B | Ag | Prototype_beta-B-Ag |
| B_nS | B_nSi | B_nS | B_nSI |
| Grap | Graphite | A9 | Graphite_A9 |
| Al4C | Al4C3 | D71 | Prototype_Al4C3-D71 |
| Li2Z | Zn3Li2 | Li2Z | Zn3Li2 |
| ZnS | Zincblende | B3 | Zincblende_B3 |
| D022 | Al3M_D022 | D022 | Prototype_TiAl3-D022 |
| D019 | AlM_D019 | D019 | Prototype_Ni3Sn-D019 |
| AlTi | AlTi | L10 | Prototype_AuCu-L10 |
| IMYZ | I_Mg3YZn6 | Fm53 | I_REZn6Mg3 |

| | | | |
|---|---|---|---|
| WMYZ | W_MgYZn3 | | REMOVED |
| M3C2 | Mg3Ce2Zn3 | M3C2 | Mg3Ce2Zn3 |
| oP16 | Pnma | oP16 | Prototype_AlEr |
| oC16 | Cmcm | oC16 | Prototype_AlCe |
| hR3 | Sm | C19 | Prototype_alpha-Sm-C19 |
| BCT | BCT_A5 | A5 | BCT_A5 |
| Cr3S | Cr3Si_A15 | A15 | CUB_A15 |
| Cu6Y | Cu6Y | Cu7Y | Prototype_TbCu7 |
| CUB2 | CUB_A15 | A15 | CUB_A15 |
| HSig | High_Sigma | HSig | High_Sigma |
| Lav1 | C14-Laves | C14 | Laves_C14 |
| Lav2 | C15-Laves | C15 | Laves_C15 |
| FZr2 | FeZr2 | C16 | Prototype_Al2Cu-C16 |
| FZr3 | FeZr3 | E1a | Prototype_FeZr3-E1a |
| Sigm | Sigma | D8b | Prototype_FeCr-D8b |
| SiV3 | SiV3 | A15 | CUB_A15 |
| SnTi | SnTi3 | SnTi | Prototype_Ni3Sn-D019b |
| AlMo | AlMo~2 | AlMo | AlMo~2 |
| Gam3 | Gamma_DO3 | D03 | Prototype_BiF3-D03 |
| W2B5 | W2B5 | D8h | Prototype_B2W-D8h |
| WB_1 | WB_Alpha | Bg | Prototype_MoB-Bg |
| WB_2 | WB_Beta | B33 | Prototype_CrB-B33 |
| Cu4T | Cu4Ti | oP20 | Cu4Ti |
| CuTi | CuTi | B11 | Prototype_CuTi-B11 |
| NiMo | NiMo | NiMo | NiMo |
| L12_ | L12_FCC!FCC_A1 | L12c | L12_FCC!FCC_A1 |
| Teta | Teta | Teta | Ni2Si |
| NiT1 | NiTa | NiT1 | NiTa |
| NiT2 | NiTa2 | NiT2 | NiTa2 |
| Ni3M | Ni3MoTa | Ni3M | Ni3MoTa |
| TiNi | TiNi | B2_b | BCC_B2b |
| Ni3Z | Ni3Zr | D019 | Prototype_Ni3Sn-D019 |
| Ni5Z | Ni5Zr | C15c | Laves_C15c |
| Ni10 | Ni10Zr7 | Ni10 | Ni10Zr7 |
| A3Ni | Al3Ni2 | D513 | Prototype_Al3Ni2-D513 |
| Mn2Z | Mn2Zr | C14 | Laves_C14 |

| | | | |
|---|---|---|---|
| D82 | D82_FeZn_Gamma | D81 | Prototype_Cu5Zn8-D81 |
| FeZ1 | FeZn4 | FeZ1 | FeZn4 |
| FeZ2 | FeZn_Delta | FeZ2 | FeZn_delta |
| FeZ3 | FeZn_Zeta | FeZ3 | FeZn_zeta |
| AlNi | AlNi | B2_c | BCC_B2c |
| hP94 | M38N9 | hP94 | Prototype_Mg38Sr9 |
| oI12 | Al2N1 | C42 | Prototype_CeCu2-C42 |
| cP64 | (Al7Sr8) | cP64 | Al7Sr8 |
| P3m1 | alpha_Mg3X2(low-T) | P3m1 | alpha_Mg3X2(low-T) |
| Ia3 | beta_Mg3Y2(high-T) | Ia3 | beta_Mg3X2(high-T) |
| Mg2Q | Mg2X | C1 | Prototype_CaF2-C1 |
| Mg2X | Mg2X | C1 | Prototype_CaF2-C1 |
| Mg3X | Mg3Sb2(low-T, | Mg3X | Mg3Sb2(low-T, |
| prB2 | pre-B'' | prB2 | pre-B'' |
| B'' | B'' | B'' | B'' |
| Pnma | U2 | Pnma | U2 |
| P_6 | B' | P_6 | B' |
| IM1 | P63/mmc | IM1 | IM1-CaMgZn |
| tp40 | Al7CuX2 | E9a | Prototype_Al7Cu2Fe-E9a |
| D023 | Al3M_D023 | D023 | Prototype_ZrAl3-D023 |
| L12o | Al3M_L12 | L12 | Prototype_AuCu3-L12 |
| L12b | AuCu3-L12 | L12b | Prototype_AuCu3-L12b |
| hR60 | hR60 | hR60 | Prototype_HoAl3 |
| oP12 | Co2Si | C23 | Prototype_Co2Si-C23 |
| hP8 | Ni3Sn(Al3RE) | D019 | Prototype_Ni3Sn-D019 |
| hp8_ | Ni3Sn(AlRE3) | D019 | Prototype_Ni3Sn-D019 |
| tP20 | Zr3Al2 | tP20 | Prototype_Al2Zr3 |
| tI92 | Mg41RE5 | tI92 | Prototype_Mg41Ce5 |
| hP38 | M17N2 | hP38 | Prototype_Ni17Th2 |
| cF16 | Mg3RE | D03 | Prototype_BiF3-D03 |
| cF44 | Mg5RE | cF44 | Prototype_Mg5Gd |
| oI28 | alpha-Al11RE3 | oI28 | Prototype_Al11La3 |
| tI10 | beta-Al11RE3 | D13b | Prototype_Al4Ba-D13b |
| E | E-phase | E | Prototype_CeCr2Al20 |