

Date and time of run 24-MAR-2005 01:40:09
> 050324013830,6 MTDATA 4.73 2002-11-15 14:22, LOG /asterix/users/hkdb/harry/mtdata/mt6.log
> 050324013833,6 U-32749 on LNX-000-R (UNIX) using sgm000.exe
> 050324014009,6 MODULE 3 creates MPI file /asterix/users/hkdb/harry/mtdata/def.mpi
> 050324014009,6 MODULE 3 reads MPI file /asterix/users/hkdb/harry/mtdata/def.mpi
> 050324014009,6 MODULE 3 creates MPR file /asterix/users/hkdb/harry/mtdata/def.mpr
\$(Number of lines of title) 8
* DATAFILE = /asterix/users/hkdb/harry/mtdata/def.mpi - CREATED 01:40:
09 24-MAR-2005
* SYSTEM = Fe,Mo,Cr,Ni,C,Mn,Si,
* NUMBER OF PHASES = 55
* NUMBER OF SPECIES = 200
*

DATA FILE = /asterix/users/hkdb/harry/mtdata/def.mpi

*** PROBLEM settings ***

SYSTEM ELEMENTS : CCrFeMnMoNiSi

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
1	Fe	#PARA!	1212.24		
2	Mo	#PARA!	20.8464		
3	Cr	#PARA!	328.871		
4	Ni	#PARA!	202.931		
5	C	NORMAL	0.832570		
6	Mn	#PARA!	9.64724		
7	Si	#PARA!	26.7042		

NUMBER	PHASE	STATUS	MODEL
1	DIAMOND_A4	ABSENT	REDLICH-KISTER
2	GRAPHITE	ABSENT	PURE SUBSTANCE
3	LIQUID	ABSENT	REDLICH-KISTER
4	GAS	ABSENT	IDEAL GAS
5	BCC_A2	NORMAL	SUBLATTICE
6	CEMENTITE	ABSENT	SUBLATTICE
7	FCC_A1	NORMAL	SUBLATTICE
8	HCP_A3	ABSENT	SUBLATTICE
9	KSI_CARBIDE	ABSENT	SUBLATTICE
10	M3C2	ABSENT	SUBLATTICE
11	M7C3	ABSENT	SUBLATTICE
12	M23C6	ABSENT	SUBLATTICE

13	M6C	ABSENT	SUBLATTICE
14	CBCC_A12	ABSENT	SUBLATTICE
15	CUB_A13	ABSENT	SUBLATTICE
16	FE4N	ABSENT	PURE SUBSTANCE
17	FECN_CHI	ABSENT	PURE SUBSTANCE
18	M5C2	ABSENT	SUBLATTICE
19	V3C2	ABSENT	SUBLATTICE
20	FE8SI2C	ABSENT	PURE SUBSTANCE
21	MC_ETA	ABSENT	REDLICH-KISTER
22	MC_SHP	ABSENT	PURE SUBSTANCE
23	SIC	ABSENT	PURE SUBSTANCE
24	CR3SI	ABSENT	SUBLATTICE
25	CRSI2	ABSENT	SUBLATTICE
26	CHI_A12	ABSENT	SUBLATTICE
27	SIGMA	ABSENT	SUBLATTICE
28	LAVES_PHASE	ABSENT	SUBLATTICE
29	MU_PHASE	ABSENT	SUBLATTICE
30	R_PHASE	ABSENT	SUBLATTICE
31	MONI_DELTA	ABSENT	SUBLATTICE
32	P_PHASE	ABSENT	SUBLATTICE
33	CR3MN5	ABSENT	PURE SUBSTANCE
34	HIGH_SIGMA	ABSENT	SUBLATTICE
35	CR5SI3	ABSENT	PURE SUBSTANCE
36	CRSI	ABSENT	PURE SUBSTANCE
37	AL5FE4	ABSENT	PURE SUBSTANCE
38	FE1SI1	ABSENT	SUBLATTICE
39	FE5SI3	ABSENT	SUBLATTICE
40	M3SI	ABSENT	SUBLATTICE
41	FE2SI	ABSENT	PURE SUBSTANCE
42	FESI2_H	ABSENT	PURE SUBSTANCE
43	FESI2_L	ABSENT	PURE SUBSTANCE
44	MN2NI	ABSENT	PURE SUBSTANCE
45	MN3NI	ABSENT	PURE SUBSTANCE
46	MNNI2	ABSENT	PURE SUBSTANCE
47	MNNI3	ABSENT	PURE SUBSTANCE
48	MNNI	ABSENT	PURE SUBSTANCE
49	MN11SI19	ABSENT	PURE SUBSTANCE
50	MN6SI	ABSENT	PURE SUBSTANCE
51	MN9SI2	ABSENT	PURE SUBSTANCE
52	MONI3_GAMMA	ABSENT	PURE SUBSTANCE
53	MONI4_BETA	ABSENT	PURE SUBSTANCE
54	AL3NI2	ABSENT	PURE SUBSTANCE
55	ALNI_B2	ABSENT	SUBLATTICE

NUMBER	SUBSTANCE	STATUS/CONSTRAINT
1	C<DIAMOND_A4>	NORMAL
2	Si<DIAMOND_A4>	NORMAL
3	C<GRAPHITE>	NORMAL
4	C<LIQUID>	NORMAL

5	Cr<LIQUID>	NORMAL
6	Fe<LIQUID>	NORMAL
7	Mn<LIQUID>	NORMAL
8	Mo<LIQUID>	NORMAL
9	Ni<LIQUID>	NORMAL
10	Si<LIQUID>	NORMAL
11	C<g>	NORMAL
12	C2<g>	NORMAL
13	C3<g>	NORMAL
14	C4<g>	NORMAL
15	C5<g>	NORMAL
16	C6<g>	NORMAL
17	C7<g>	NORMAL
18	Cr<g>	NORMAL
19	Fe<g>	NORMAL
20	Mn<g>	NORMAL
21	Mo<g>	NORMAL
22	Cr:1<BCC_A2>	NORMAL
23	Fe:1<BCC_A2>	NORMAL
24	Mn:1<BCC_A2>	NORMAL
25	Mo:1<BCC_A2>	NORMAL
26	Ni:1<BCC_A2>	NORMAL
27	Si:1<BCC_A2>	NORMAL
28	C:2<BCC_A2>	NORMAL
29	Va:2<BCC_A2>	NORMAL
30	Cr:1<CEMENTITE>	NORMAL
31	Fe:1<CEMENTITE>	NORMAL
32	Mn:1<CEMENTITE>	NORMAL
33	Mo:1<CEMENTITE>	NORMAL
34	Ni:1<CEMENTITE>	NORMAL
35	C:2<CEMENTITE>	NORMAL
36	Cr:1<FCC_A1>	NORMAL
37	Fe:1<FCC_A1>	NORMAL
38	Mn:1<FCC_A1>	NORMAL
39	Mo:1<FCC_A1>	NORMAL
40	Ni:1<FCC_A1>	NORMAL
41	Si:1<FCC_A1>	NORMAL
42	C:2<FCC_A1>	NORMAL
43	Va:2<FCC_A1>	NORMAL
44	Cr:1<HCP_A3>	NORMAL
45	Fe:1<HCP_A3>	NORMAL
46	Mn:1<HCP_A3>	NORMAL
47	Mo:1<HCP_A3>	NORMAL
48	Ni:1<HCP_A3>	NORMAL
49	Si:1<HCP_A3>	NORMAL
50	C:2<HCP_A3>	NORMAL
51	Va:2<HCP_A3>	NORMAL
52	Cr:1<KSI_CARBIDE>	NORMAL
53	Fe:1<KSI_CARBIDE>	NORMAL
54	Mo:1<KSI_CARBIDE>	NORMAL

55	C:2<KSI_CARBIDE>	NORMAL
56	Cr:1<M3C2>	NORMAL
57	Mo:1<M3C2>	NORMAL
58	C:2<M3C2>	NORMAL
59	Cr:1<M7C3>	NORMAL
60	Fe:1<M7C3>	NORMAL
61	Mn:1<M7C3>	NORMAL
62	Mo:1<M7C3>	NORMAL
63	C:2<M7C3>	NORMAL
64	Cr:1<M23C6>	NORMAL
65	Fe:1<M23C6>	NORMAL
66	Mn:1<M23C6>	NORMAL
67	Ni:1<M23C6>	NORMAL
68	Cr:2<M23C6>	NORMAL
69	Fe:2<M23C6>	NORMAL
70	Mn:2<M23C6>	NORMAL
71	Mo:2<M23C6>	NORMAL
72	Ni:2<M23C6>	NORMAL
73	C:3<M23C6>	NORMAL
74	Fe:1<M6C>	NORMAL
75	Mo:2<M6C>	NORMAL
76	Cr:3<M6C>	NORMAL
77	Fe:3<M6C>	NORMAL
78	Mo:3<M6C>	NORMAL
79	C:4<M6C>	NORMAL
80	Cr:1<CBCC_A12>	NORMAL
81	Fe:1<CBCC_A12>	NORMAL
82	Mn:1<CBCC_A12>	NORMAL
83	Ni:1<CBCC_A12>	NORMAL
84	Si:1<CBCC_A12>	NORMAL
85	C:2<CBCC_A12>	NORMAL
86	Va:2<CBCC_A12>	NORMAL
87	Cr:1<CUB_A13>	NORMAL
88	Fe:1<CUB_A13>	NORMAL
89	Mn:1<CUB_A13>	NORMAL
90	Ni:1<CUB_A13>	NORMAL
91	Si:1<CUB_A13>	NORMAL
92	C:2<CUB_A13>	NORMAL
93	Va:2<CUB_A13>	NORMAL
94	Fe4C<FE4N>	NORMAL
95	Fe2.2C<FECN_CHI>	NORMAL
96	Fe:1<M5C2>	NORMAL
97	Mn:1<M5C2>	NORMAL
98	C:2<M5C2>	NORMAL
99	Fe:1<V3C2>	NORMAL
100	Mn:1<V3C2>	NORMAL
101	C:2<V3C2>	NORMAL
102	Fe8Si2C<FE8SI2C>	NORMAL
103	MoC<MC_ETA>	NORMAL
104	Mo<MC_ETA>	NORMAL

105	MoC<MC_SHP>	NORMAL
106	SiC<SIC>	NORMAL
107	Cr:1<CR3SI>	NORMAL
108	Si:1<CR3SI>	NORMAL
109	Cr:2<CR3SI>	NORMAL
110	Si:2<CR3SI>	NORMAL
111	Cr:1<CRSI2>	NORMAL
112	Si:1<CRSI2>	NORMAL
113	Cr:2<CRSI2>	NORMAL
114	Si:2<CRSI2>	NORMAL
115	Cr:1<CHI_A12>	NORMAL
116	Fe:1<CHI_A12>	NORMAL
117	Cr:2<CHI_A12>	NORMAL
118	Mo:2<CHI_A12>	NORMAL
119	Cr:3<CHI_A12>	NORMAL
120	Fe:3<CHI_A12>	NORMAL
121	Mo:3<CHI_A12>	NORMAL
122	Fe:1<SIGMA>	NORMAL
123	Mn:1<SIGMA>	NORMAL
124	Ni:1<SIGMA>	NORMAL
125	Cr:2<SIGMA>	NORMAL
126	Mo:2<SIGMA>	NORMAL
127	Cr:3<SIGMA>	NORMAL
128	Fe:3<SIGMA>	NORMAL
129	Mn:3<SIGMA>	NORMAL
130	Mo:3<SIGMA>	NORMAL
131	Ni:3<SIGMA>	NORMAL
132	Cr:1<LAVES_PHASE>	NORMAL
133	Fe:1<LAVES_PHASE>	NORMAL
134	Mo:2<LAVES_PHASE>	NORMAL
135	Cr:1<MU_PHASE>	NORMAL
136	Fe:1<MU_PHASE>	NORMAL
137	Ni:1<MU_PHASE>	NORMAL
138	Mo:2<MU_PHASE>	NORMAL
139	Cr:3<MU_PHASE>	NORMAL
140	Fe:3<MU_PHASE>	NORMAL
141	Mo:3<MU_PHASE>	NORMAL
142	Ni:3<MU_PHASE>	NORMAL
143	Cr:1<R_PHASE>	NORMAL
144	Fe:1<R_PHASE>	NORMAL
145	Ni:1<R_PHASE>	NORMAL
146	Mo:2<R_PHASE>	NORMAL
147	Cr:3<R_PHASE>	NORMAL
148	Fe:3<R_PHASE>	NORMAL
149	Mo:3<R_PHASE>	NORMAL
150	Ni:3<R_PHASE>	NORMAL
151	Cr:1<MONI_DELTA>	NORMAL
152	Fe:1<MONI_DELTA>	NORMAL
153	Ni:1<MONI_DELTA>	NORMAL
154	Cr:2<MONI_DELTA>	NORMAL

155	Fe:2<MONI_DELTA>	NORMAL
156	Mo:2<MONI_DELTA>	NORMAL
157	Ni:2<MONI_DELTA>	NORMAL
158	Mo:3<MONI_DELTA>	NORMAL
159	Cr:1<P_PHASE>	NORMAL
160	Fe:1<P_PHASE>	NORMAL
161	Ni:1<P_PHASE>	NORMAL
162	Cr:2<P_PHASE>	NORMAL
163	Fe:2<P_PHASE>	NORMAL
164	Mo:2<P_PHASE>	NORMAL
165	Ni:2<P_PHASE>	NORMAL
166	Mo:3<P_PHASE>	NORMAL
167	Cr3Mn5<CR3MN5>	NORMAL
168	Mn:1<HIGH_SIGMA>	NORMAL
169	Cr:2<HIGH_SIGMA>	NORMAL
170	Cr:3<HIGH_SIGMA>	NORMAL
171	Mn:3<HIGH_SIGMA>	NORMAL
172	Cr5Si3<CR5SI3>	NORMAL
173	CrSi<CRSI>	NORMAL
174	Fe<AL5FE4>	NORMAL
175	Fe:1<FE1SI1>	NORMAL
176	Mn:1<FE1SI1>	NORMAL
177	Si:2<FE1SI1>	NORMAL
178	Fe:1<FE5SI3>	NORMAL
179	Mn:1<FE5SI3>	NORMAL
180	Si:2<FE5SI3>	NORMAL
181	Fe:1<M3SI>	NORMAL
182	Mn:1<M3SI>	NORMAL
183	Si:2<M3SI>	NORMAL
184	Fe.666667Si.333333<F	NORMAL
185	Fe.3Si.7<FESI2_H>	NORMAL
186	Fe.333333Si.666667<F	NORMAL
187	Mn2Ni<MN2NI>	NORMAL
188	Mn3Ni<MN3NI>	NORMAL
189	MnNi2<MNNI2>	NORMAL
190	MnNi3<MNNI3>	NORMAL
191	MnNi<MNNI>	NORMAL
192	Mn11Si19<MN11SI19>	NORMAL
193	Mn.85Si.15<MN6SI>	NORMAL
194	Mn.825Si.175<MN9SI2>	NORMAL
195	MoNi3<MONI3_GAMMA>	NORMAL
196	MoNi4<MONI4_BETA>	NORMAL
197	Ni.6Ni.4<AL3NI2>	NORMAL
198	Ni:1<ALNI_B2>	NORMAL
199	Va:1<ALNI_B2>	NORMAL
200	Ni:2<ALNI_B2>	NORMAL

UNARY
C<DIAMOND_A4>

SOURCE
sgte_sol

Tmin/K
298.15

Tmax/K
6000.00

Si<DIAMOND_A4>	sgte_sol	298.14	3600.00
C<GRAPHITE>	sgte_sol	298.15	6000.00
C<LIQUID>	sgte_sol	298.15	6000.00
Cr<LIQUID>	sgte_sol	298.14	6000.00
Fe<LIQUID>	sgte_sol	298.15	6000.00
Mn<LIQUID>	sgte_sol	298.14	2000.00
Mo<LIQUID>	sgte_sol	298.14	5000.00
Ni<LIQUID>	sgte_sol	298.14	3000.00
Si<LIQUID>	sgte_sol	298.14	3600.00
C<g>	sgte_sol	298.15	6000.00
C2<g>	sgte_sol	298.15	6000.00
C3<g>	sgte_sol	298.15	6000.00
C4<g>	sgte_sol	298.15	6000.00
C5<g>	sgte_sol	298.15	6000.00
C6<g>	sgte_sol	298.15	6000.00
C7<g>	sgte_sol	298.15	6000.00
Cr<g>	sgte_sol	298.15	6000.00
Fe<g>	sgte_sol	298.15	6000.00
Mn<g>	sgte_sol	298.15	5500.00
Mo<g>	sgte_sol	298.15	6000.00
Cr:C<BCC_A2:1:3>	sgte_sol	298.15	6000.00
Cr:Va<BCC_A2:1:3>	sgte_sol	298.15	6000.00
Fe:C<BCC_A2:1:3>	sgte_sol	298.15	6000.00
Fe:Va<BCC_A2:1:3>	sgte_sol	298.15	6000.00
Mn:C<BCC_A2:1:3>	sgte_sol	298.15	2000.00
Mn:Va<BCC_A2:1:3>	sgte_sol	298.14	2000.00
Mo:C<BCC_A2:1:3>	sgte_sol	298.15	5000.00
Mo:Va<BCC_A2:1:3>	sgte_sol	298.14	5000.00
Ni:C<BCC_A2:1:3>	sgte_sol	298.15	3000.00
Ni:Va<BCC_A2:1:3>	sgte_sol	298.14	3000.00
Si:C<BCC_A2:1:3>	sgte_sol	298.15	3600.00
Si:Va<BCC_A2:1:3>	sgte_sol	298.14	3600.00
Cr:C<CEMENTITE:3:1>	sgte_sol	298.15	6000.00
Fe:C<CEMENTITE:3:1>	sgte_sol	298.15	6000.00
Mn:C<CEMENTITE:3:1>	sgte_sol	298.15	2000.00
Mo:C<CEMENTITE:3:1>	sgte_sol	298.15	5000.00
Ni:C<CEMENTITE:3:1>	sgte_sol	298.15	3000.00
Cr:C<FCC_A1:1:1>	sgte_sol	298.15	6000.00
Cr:Va<FCC_A1:1:1>	sgte_sol	298.15	6000.00
Fe:C<FCC_A1:1:1>	sgte_sol	298.15	6000.00
Fe:Va<FCC_A1:1:1>	sgte_sol	298.15	6000.00
Mn:C<FCC_A1:1:1>	sgte_sol	298.15	2000.00
Mn:Va<FCC_A1:1:1>	sgte_sol	298.14	2000.00
Mo:C<FCC_A1:1:1>	sgte_sol	298.15	5000.00
Mo:Va<FCC_A1:1:1>	sgte_sol	298.14	5000.00
Ni:C<FCC_A1:1:1>	sgte_sol	298.15	3000.00
Ni:Va<FCC_A1:1:1>	sgte_sol	298.14	3000.00
Si:C<FCC_A1:1:1>	sgte_sol	298.15	3600.00
Si:Va<FCC_A1:1:1>	sgte_sol	298.14	3600.00
Cr:C<HCP_A3:1:0.5>	sgte_sol	298.15	6000.00

Cr:Va<HCP_A3:1:0.5>	sgte_sol	298.15	6000.00
Fe:C<HCP_A3:1:0.5>	sgte_sol	298.15	6000.00
Fe:Va<HCP_A3:1:0.5>	sgte_sol	298.14	6000.00
Mn:C<HCP_A3:1:0.5>	sgte_sol	298.15	2000.00
Mn:Va<HCP_A3:1:0.5>	sgte_sol	298.14	2000.00
Mo:C<HCP_A3:1:0.5>	sgte_sol	298.15	5000.00
Mo:Va<HCP_A3:1:0.5>	sgte_sol	298.14	5000.00
Ni:C<HCP_A3:1:0.5>	sgte_sol	298.15	3000.00
Ni:Va<HCP_A3:1:0.5>	sgte_sol	298.14	3000.00
Si:C<HCP_A3:1:0.5>	NODATA	298.15	298.00
Si:Va<HCP_A3:1:0.5>	sgte_sol	298.14	3600.00
Cr:C<KSI_CARBIDE:3:1>	sgte_sol	298.15	6000.00
Fe:C<KSI_CARBIDE:3:1>	sgte_sol	298.15	6000.00
Mo:C<KSI_CARBIDE:3:1>	sgte_sol	298.15	5000.00
Cr:C<M3C2:3:2>	sgte_sol	298.15	6000.00
Mo:C<M3C2:3:2>	sgte_sol	298.15	5000.00
Cr:C<M7C3:7:3>	sgte_sol	298.15	6000.00
Fe:C<M7C3:7:3>	sgte_sol	298.15	6000.00
Mn:C<M7C3:7:3>	sgte_sol	298.15	2000.00
Mo:C<M7C3:7:3>	sgte_sol	298.15	5000.00
Cr:Cr:C<M23C6:20:3:6>	sgte_sol	298.15	6000.00
Cr:Fe:C<M23C6:20:3:6>	sgte_sol	298.15	6000.00
Cr:Mn:C<M23C6:20:3:6>	sgte_sol	298.15	2000.00
Cr:Mo:C<M23C6:20:3:6>	sgte_sol	298.15	5000.00
Cr:Ni:C<M23C6:20:3:6>	NODATA	298.15	298.00
Fe:Cr:C<M23C6:20:3:6>	sgte_sol	298.15	6000.00
Fe:Fe:C<M23C6:20:3:6>	sgte_sol	298.15	6000.00
Fe:Mn:C<M23C6:20:3:6>	sgte_sol	298.15	2000.00
Fe:Mo:C<M23C6:20:3:6>	sgte_sol	298.15	5000.00
Fe:Ni:C<M23C6:20:3:6>	NODATA	298.15	298.00
Mn:Cr:C<M23C6:20:3:6>	sgte_sol	298.15	2000.00
Mn:Fe:C<M23C6:20:3:6>	sgte_sol	298.15	2000.00
Mn:Mn:C<M23C6:20:3:6>	sgte_sol	298.15	2000.00
Mn:Mo:C<M23C6:20:3:6>	NODATA	298.15	298.00
Mn:Ni:C<M23C6:20:3:6>	NODATA	298.15	298.00
Ni:Cr:C<M23C6:20:3:6>	NODATA	298.15	298.00
Ni:Fe:C<M23C6:20:3:6>	NODATA	298.15	298.00
Ni:Mn:C<M23C6:20:3:6>	NODATA	298.15	298.00
Ni:Mo:C<M23C6:20:3:6>	NODATA	298.15	298.00
Ni:Ni:C<M23C6:20:3:6>	sgte_sol	298.15	3000.00
Fe:Mo:Cr:C<M6C:2:2:2:1>	sgte_sol	298.15	5000.00
Fe:Mo:Fe:C<M6C:2:2:2:1>	sgte_sol	298.15	5000.00
Fe:Mo:Mo:C<M6C:2:2:2:1>	sgte_sol	298.15	5000.00
Cr:C<CBCC_A12:1:1>	NODATA	298.15	298.00
Cr:Va<CBCC_A12:1:1>	sgte_sol	298.15	6000.00
Fe:C<CBCC_A12:1:1>	sgte_sol	298.15	6000.00
Fe:Va<CBCC_A12:1:1>	sgte_sol	298.15	6000.00
Mn:C<CBCC_A12:1:1>	sgte_sol	298.15	2000.00
Mn:Va<CBCC_A12:1:1>	sgte_sol	298.14	2000.00
Ni:C<CBCC_A12:1:1>	NODATA	298.15	298.00

Ni:Va<CBCC_A12:1:1>	sgte_sol	298.14	3000.00
Si:C<CBCC_A12:1:1>	sgte_sol	298.14	3000.00
Si:Va<CBCC_A12:1:1>	sgte_sol	298.14	3600.00
Cr:C<CUB_A13:1:1>	NODATA	298.15	298.00
Cr:Va<CUB_A13:1:1>	sgte_sol	298.15	6000.00
Fe:C<CUB_A13:1:1>	sgte_sol	298.15	6000.00
Fe:Va<CUB_A13:1:1>	sgte_sol	298.15	6000.00
Mn:C<CUB_A13:1:1>	sgte_sol	298.15	2000.00
Mn:Va<CUB_A13:1:1>	sgte_sol	298.14	2000.00
Ni:C<CUB_A13:1:1>	NODATA	298.15	298.00
Ni:Va<CUB_A13:1:1>	sgte_sol	298.14	3000.00
Si:C<CUB_A13:1:1>	sgte_sol	298.14	3000.00
Si:Va<CUB_A13:1:1>	sgte_sol	298.14	3600.00
Fe4C<FE4N>	sgte_sol	298.15	6000.00
Fe2.2C<FECN_CHI>	sgte_sol	298.15	6000.00
Fe:C<M5C2:5:2>	sgte_sol	298.15	6000.00
Mn:C<M5C2:5:2>	sgte_sol	298.15	2000.00
Fe:C<V3C2:3:2>	sgte_sol	298.15	6000.00
Mn:C<V3C2:3:2>	sgte_sol	298.15	6000.00
Fe8Si2C<FE8SI2C>	sgte_sol	298.15	3600.00
MoC<MC_ETA>	sgte_sol	298.15	5000.00
Mo<MC_ETA>	sgte_sol	298.15	5000.00
MoC<MC_SHP>	sgte_sol	298.15	5000.00
SiC<SIC>	sgte_sol	298.14	4000.00
Cr:Cr<CR3SI:3:1>	sgte_sol	298.15	6000.00
Cr:Si<CR3SI:3:1>	sgte_sol	298.15	3600.00
Si:Cr<CR3SI:3:1>	sgte_sol	298.15	3600.00
Si:Si<CR3SI:3:1>	sgte_sol	298.15	3600.00
Cr:Cr<CRSI2:1:2>	sgte_sol	298.15	6000.00
Cr:Si<CRSI2:1:2>	sgte_sol	298.15	6000.00
Si:Cr<CRSI2:1:2>	sgte_sol	298.15	3600.00
Si:Si<CRSI2:1:2>	sgte_sol	298.15	3600.00
Cr:Cr:Cr<CHI_A12:24:10:24>	sgte_sol	298.15	6000.00
Cr:Cr:Fe<CHI_A12:24:10:24>	sgte_sol	298.15	6000.00
Cr:Cr:Mo<CHI_A12:24:10:24>	sgte_sol	298.15	5000.00
Cr:Mo:Cr<CHI_A12:24:10:24>	sgte_sol	298.15	5000.00
Cr:Mo:Fe<CHI_A12:24:10:24>	sgte_sol	298.15	5000.00
Cr:Mo:Mo<CHI_A12:24:10:24>	sgte_sol	298.15	5000.00
Fe:Cr:Cr<CHI_A12:24:10:24>	sgte_sol	298.15	6000.00
Fe:Cr:Fe<CHI_A12:24:10:24>	sgte_sol	298.15	6000.00
Fe:Cr:Mo<CHI_A12:24:10:24>	sgte_sol	298.15	5000.00
Fe:Mo:Cr<CHI_A12:24:10:24>	sgte_sol	298.15	5000.00
Fe:Mo:Fe<CHI_A12:24:10:24>	sgte_sol	298.15	5000.00
Fe:Mo:Mo<CHI_A12:24:10:24>	sgte_sol	298.15	5000.00
Fe:Cr:Cr<SIGMA:8:4:18>	sgte_sol	298.15	6000.00
Fe:Cr:Fe<SIGMA:8:4:18>	sgte_sol	298.15	6000.00
Fe:Cr:Mn<SIGMA:8:4:18>	NODATA	298.15	298.00
Fe:Cr:Mo<SIGMA:8:4:18>	sgte_sol	298.15	5000.00
Fe:Cr:Ni<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Fe:Mo:Cr<SIGMA:8:4:18>	sgte_sol	298.15	5000.00

Fe:Mo:Fe<SIGMA:8:4:18>	sgte_sol	298.15	5000.00
Fe:Mo:Mn<SIGMA:8:4:18>	NODATA	298.15	298.00
Fe:Mo:Mo<SIGMA:8:4:18>	sgte_sol	298.15	5000.00
Fe:Mo:Ni<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Mn:Cr:Cr<SIGMA:8:4:18>	sgte_sol	298.15	2000.00
Mn:Cr:Fe<SIGMA:8:4:18>	NODATA	298.15	298.00
Mn:Cr:Mn<SIGMA:8:4:18>	sgte_sol	298.15	2000.00
Mn:Cr:Mo<SIGMA:8:4:18>	NODATA	298.15	298.00
Mn:Cr:Ni<SIGMA:8:4:18>	NODATA	298.15	298.00
Mn:Mo:Cr<SIGMA:8:4:18>	NODATA	298.15	298.00
Mn:Mo:Fe<SIGMA:8:4:18>	NODATA	298.15	298.00
Mn:Mo:Mn<SIGMA:8:4:18>	NODATA	298.15	298.00
Mn:Mo:Mo<SIGMA:8:4:18>	NODATA	298.15	298.00
Mn:Mo:Ni<SIGMA:8:4:18>	NODATA	298.15	298.00
Ni:Cr:Cr<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Ni:Cr:Fe<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Ni:Cr:Mn<SIGMA:8:4:18>	NODATA	298.15	298.00
Ni:Cr:Mo<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Ni:Cr:Ni<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Ni:Mo:Cr<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Ni:Mo:Fe<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Ni:Mo:Mn<SIGMA:8:4:18>	NODATA	298.15	298.00
Ni:Mo:Mo<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Ni:Mo:Ni<SIGMA:8:4:18>	sgte_sol	298.15	3000.00
Cr:Mo<LAVES_PHASE:2:1>	sgte_sol	298.15	5000.00
Fe:Mo<LAVES_PHASE:2:1>	sgte_sol	298.15	5000.00
Cr:Mo:Cr<MU_PHASE:7:2:4>	sgte_sol	298.15	5000.00
Cr:Mo:Fe<MU_PHASE:7:2:4>	sgte_sol	298.15	5000.00
Cr:Mo:Mo<MU_PHASE:7:2:4>	sgte_sol	298.15	5000.00
Cr:Mo:Ni<MU_PHASE:7:2:4>	sgte_sol	298.15	3000.00
Fe:Mo:Cr<MU_PHASE:7:2:4>	sgte_sol	298.15	5000.00
Fe:Mo:Fe<MU_PHASE:7:2:4>	sgte_sol	298.15	5000.00
Fe:Mo:Mo<MU_PHASE:7:2:4>	sgte_sol	298.15	5000.00
Fe:Mo:Ni<MU_PHASE:7:2:4>	sgte_sol	298.15	3000.00
Ni:Mo:Cr<MU_PHASE:7:2:4>	sgte_sol	298.15	3000.00
Ni:Mo:Fe<MU_PHASE:7:2:4>	sgte_sol	298.15	3000.00
Ni:Mo:Mo<MU_PHASE:7:2:4>	sgte_sol	298.15	3000.00
Ni:Mo:Ni<MU_PHASE:7:2:4>	sgte_sol	298.15	3000.00
Cr:Mo:Cr<R_PHASE:27:14:12>	sgte_sol	298.15	5000.00
Cr:Mo:Fe<R_PHASE:27:14:12>	sgte_sol	298.15	5000.00
Cr:Mo:Mo<R_PHASE:27:14:12>	sgte_sol	298.15	5000.00
Cr:Mo:Ni<R_PHASE:27:14:12>	NODATA	298.15	298.00
Fe:Mo:Cr<R_PHASE:27:14:12>	sgte_sol	298.15	5000.00
Fe:Mo:Fe<R_PHASE:27:14:12>	sgte_sol	298.15	5000.00
Fe:Mo:Mo<R_PHASE:27:14:12>	sgte_sol	298.15	5000.00
Fe:Mo:Ni<R_PHASE:27:14:12>	sgte_sol	298.15	3000.00
Ni:Mo:Cr<R_PHASE:27:14:12>	NODATA	298.15	298.00
Ni:Mo:Fe<R_PHASE:27:14:12>	sgte_sol	298.15	3000.00
Ni:Mo:Mo<R_PHASE:27:14:12>	sgte_sol	298.15	3000.00
Ni:Mo:Ni<R_PHASE:27:14:12>	sgte_sol	298.15	3000.00

Cr:Cr:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	5000.00
Cr:Fe:Mo<MONI_DELTA:24:20:12>	NODATA	298.15	298.00
Cr:Mo:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	5000.00
Cr:Ni:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	3000.00
Fe:Cr:Mo<MONI_DELTA:24:20:12>	NODATA	298.15	298.00
Fe:Fe:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	5000.00
Fe:Mo:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	5000.00
Fe:Ni:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	3000.00
Ni:Cr:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	3000.00
Ni:Fe:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	3000.00
Ni:Mo:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	3000.00
Ni:Ni:Mo<MONI_DELTA:24:20:12>	sgte_sol	298.15	3000.00
Cr:Cr:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	5000.00
Cr:Fe:Mo<P_PHASE:24:20:12>	NODATA	298.15	298.00
Cr:Mo:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	5000.00
Cr:Ni:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	3000.00
Fe:Cr:Mo<P_PHASE:24:20:12>	NODATA	298.15	298.00
Fe:Fe:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	5000.00
Fe:Mo:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	5000.00
Fe:Ni:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	3000.00
Ni:Cr:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	3000.00
Ni:Fe:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	3000.00
Ni:Mo:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	3000.00
Ni:Ni:Mo<P_PHASE:24:20:12>	sgte_sol	298.15	3000.00
Cr3Mn5<CR3MN5>	sgte_sol	298.15	2000.00
Mn:Cr:Cr<HIGH_SIGMA:8:4:18>	sgte_sol	298.15	2000.00
Mn:Cr:Mn<HIGH_SIGMA:8:4:18>	sgte_sol	298.15	2000.00
Cr5Si3<CR5SI3>	sgte_sol	298.15	6000.00
CrSi<CRSI>	sgte_sol	298.15	6000.00
Fe<AL5FE4>	sgte_sol	298.15	6000.00
Fe:Si<FE1SI1:0.5:0.5>	sgte_sol	298.15	3600.00
Mn:Si<FE1SI1:0.5:0.5>	sgte_sol	298.15	6000.00
Fe:Si<FE5SI3:0.625:0.375>	sgte_sol	298.15	3600.00
Mn:Si<FE5SI3:0.625:0.375>	sgte_sol	298.14	3000.00
Fe:Si<M3SI:3:1>	sgte_sol	298.15	3600.00
Mn:Si<M3SI:3:1>	sgte_sol	298.15	6000.00
Fe.666667Si.333333<FE2SI>	sgte_sol	298.15	3600.00
Fe.3Si.7<FESI2_H>	sgte_sol	298.15	3600.00
Fe.333333Si.666667<FESI2_L>	sgte_sol	298.15	3600.00
Mn2Ni<MN2NI>	sgte_sol	298.15	3000.00
Mn3Ni<MN3NI>	sgte_sol	298.15	3000.00
MnNi2<MNNI2>	sgte_sol	298.15	3000.00
MnNi3<MNNI3>	sgte_sol	298.15	3000.00
MnNi<MNNI>	sgte_sol	298.15	3000.00
Mn11Si19<MN11SI19>	sgte_sol	298.15	6000.00
Mn.85Si.15<MN6SI>	sgte_sol	298.14	2000.00
Mn.825Si.175<MN9SI2>	sgte_sol	298.14	2000.00
MoNi3<MONI3_GAMMA>	sgte_sol	298.15	3000.00
MoNi4<MONI4_BETA>	sgte_sol	298.15	3000.00
Ni.6Ni.4<AL3NI2>	sgte_sol	298.15	3000.00

Ni:Ni<ALNI_B2:0.5:0.5>	sgte_sol	298.15	3000.00
Va:Ni<ALNI_B2:0.5:0.5>	sgte_sol	298.15	3000.00

TEMPERATURE	:	473.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

Stage 1* only requested

*** MULTIPHASE - Stage 1* Results ***

Temperature = 473.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000

Si
1.0000E+02 BCC_A2 0.0075000

Gibbs Energy = -2.8105958317E+07 J System Enthalpy = 1.2964832708E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	573.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 573.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	

-01 1.000000E-02

Mn undef undef

9.647239E+00 5.300000E-01

Si undef undef

2.670417E+01 7.500000E-01

Total

1.802073E+03 1.000000E+02

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	BCC_A2	0.0075000		

Gibbs Energy = -3.7313314567E+07 J System Enthalpy = 1.8345348762E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	673.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 673.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	BCC_A2	0.0075000		

Gibbs Energy = -4.7505866067E+07 J System Enthalpy = 2.4249107900E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE : 773.0000
PRESSURE/Pa : 101325.0

VOLUME/m3 : undefined
 SYSTEM AMOUNT/mol : undefined
 COMP. AMOUNTS/mol : 1212.241 20.84636 328.8715
 202.9307
 COMP. AMOUNTS/mol : 0.8325701 9.647239 26.70417
 SYSTEM MASS/kg : undefined
 COMP. MASSES/kg : 67.70000 2.000000 17.10000
 11.91000
 COMP. MASSES/kg : 0.1000000E-01 0.5300000 0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 773.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase			
		Fe	Mo	Cr	
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000	
		Ni	C	Mn	
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000	
		Si			
1.0000E+02	BCC_A2	0.0075000			

Gibbs Energy = -5.8625335487E+07 J System Enthalpy = 3.0847241616E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	873.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
		202.9307		
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
		11.91000		
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 873.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	FCC_A1	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	FCC_A1	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	FCC_A1	0.0075000		

Gibbs Energy = -7.0736645633E+07 J System Enthalpy = 4.2282911589E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	973.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 973.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		

2.084636E+01 2.000000E+00
 Cr
 3.288715E+02 1.710000E+01
 Ni
 2.029307E+02 1.191000E+01
 C
 -01 1.000000E-02
 Mn
 9.647239E+00 5.300000E-01
 Si
 2.670417E+01 7.500000E-01
 Total
 1.802073E+03 1.000000E+02

undef undef
 undef undef
 undef undef
 undef undef
 undef undef

8.325701E

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	FCC_A1	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	FCC_A1	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	FCC_A1	0.0075000		

Gibbs Energy = -8.3992842370E+07 J System Enthalpy = 4.7929445866E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE : 1073.000
 PRESSURE/Pa : 101325.0
 VOLUME/m3 : undefined
 SYSTEM AMOUNT/mol : undefined
 COMP. AMOUNTS/mol : 1212.241 20.84636 328.8715
 202.9307
 COMP. AMOUNTS/mol : 0.8325701 9.647239 26.70417
 SYSTEM MASS/kg : undefined
 COMP. MASSES/kg : 67.70000 2.000000 17.10000
 11.91000

COMP. MASSES/kg : 0.1000000E-01 0.5300000 0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 1073.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	FCC_A1	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	FCC_A1	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	FCC_A1	0.0075000		

Gibbs Energy = -9.7838947282E+07 J System Enthalpy = 5.3748994393E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	1173.000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
		202.9307		
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
		11.91000		
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 1173.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase			
		Fe	Mo	Cr	
1.0000E+02	FCC_A1	0.6770000	0.0200000	0.1710000	
		Ni	C	Mn	
1.0000E+02	FCC_A1	0.1191000	0.0001000	0.0053000	
		Si			

1.0000E+02 FCC_A1 0.0075000

Gibbs Energy = -1.1223621336E+08 J System Enthalpy = 5.9746650920E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	1273.000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
		202.9307		
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
		11.91000		
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 1273.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		

9.647239E+00 5.300000E-01
Si
2.670417E+01 7.500000E-01
Total
1.802073E+03 1.000000E+02

undef undef

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	FCC_A1	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	FCC_A1	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	FCC_A1	0.0075000		

Gibbs Energy = -1.2715298672E+08 J System Enthalpy = 6.5928047764E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	1371.000	1373.000	
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 1371.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	FCC_A1	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	FCC_A1	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	FCC_A1	0.0075000		

Gibbs Energy = -1.4225017380E+08 J System Enthalpy = 7.2299167128E+07 J

*** MULTIPHASE - Stage 1* Results ***

Temperature = 1373.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		

9.647239E+00 5.300000E-01
Si
2.670417E+01 7.500000E-01
Total
1.802073E+03 1.000000E+02

undef undef

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	FCC_A1	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	FCC_A1	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	FCC_A1	0.0075000		

Gibbs Energy = -1.4256306168E+08 J System Enthalpy = 7.2299167127E+07 J

*** PROBLEM settings ***
Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
NUMBER	PHASE	STATUS	MODEL		
NUMBER	SUBSTANCE	STATUS/CONSTRAINT			

TEMPERATURE : 1473.000
PRESSURE/Pa : 101325.0
VOLUME/m3 : undefined
SYSTEM AMOUNT/mol : undefined
COMP. AMOUNTS/mol : 1212.241 20.84636 328.8715
202.9307
COMP. AMOUNTS/mol : 0.8325701 9.647239 26.70417
SYSTEM MASS/kg : undefined
COMP. MASSES/kg : 67.70000 2.000000 17.10000
11.91000
COMP. MASSES/kg : 0.1000000E-01 0.5300000 0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 1473.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	BCC_A2	0.0075000		

Gibbs Energy = -1.5851593009E+08 J System Enthalpy = 8.1434133619E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE : 773.0000
PRESSURE/Pa : 101325.0
VOLUME/m3 : undefined
SYSTEM AMOUNT/mol : undefined

COMP. AMOUNTS/mol : 1212.241 20.84636 328.8715
202.9307
COMP. AMOUNTS/mol : 0.8325701 9.647239 26.70417
SYSTEM MASS/kg : undefined
COMP. MASSES/kg : 67.70000 2.000000 17.10000
11.91000
COMP. MASSES/kg : 0.1000000E-01 0.5300000 0.7500000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 773.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase			
		Fe	Mo	Cr	
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000	
		Ni	C	Mn	
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000	
		Si			
1.0000E+02	BCC_A2	0.0075000			

Gibbs Energy = -5.8625335487E+07 J System Enthalpy = 3.0847241616E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
--------	-----------	--------	--------	-------	-------

NUMBER	PHASE	STATUS	MODEL
--------	-------	--------	-------

NUMBER	SUBSTANCE	STATUS/CONSTRAINT
--------	-----------	-------------------

TEMPERATURE	:	773.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
				202.9307
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
				11.91000
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

STEPPED VARIABLE	INITIAL, FINAL AND STEP VALUES OF VARIABLE
TEMPERATURE	773.000 to 873.000 by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 773.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	BCC_A2	0.0075000		

Gibbs Energy = -5.8625335487E+07 J System Enthalpy = 3.0847241616E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
--------	-----------	--------	--------	-------	-------

NUMBER	PHASE	STATUS	MODEL
--------	-------	--------	-------

NUMBER	SUBSTANCE	STATUS/CONSTRAINT
--------	-----------	-------------------

TEMPERATURE	:	783.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

STEPPED VARIABLE	INITIAL, FINAL AND STEP VALUES OF VARIABLE
TEMPERATURE	773.000 to 873.000 by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 783.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	BCC_A2	0.0075000		

Gibbs Energy = -5.9787359054E+07 J System Enthalpy = 3.1555661568E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
--------	-----------	--------	--------	-------	-------

NUMBER	PHASE	STATUS	MODEL
--------	-------	--------	-------

NUMBER	SUBSTANCE	STATUS/CONSTRAINT
--------	-----------	-------------------

TEMPERATURE	:	793.0000			
PRESSURE/Pa	:	101325.0			
VOLUME/m3	:	undefined			
SYSTEM AMOUNT/mol	:	undefined			
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715	
202.9307					

COMP. AMOUNTS/mol : 0.8325701 9.647239 26.70417
 SYSTEM MASS/kg : undefined
 COMP. MASSES/kg : 67.70000 2.000000 17.10000
 11.91000
 COMP. MASSES/kg : 0.1000000E-01 0.5300000 0.7500000

STEPPED VARIABLE INITIAL, FINAL AND STEP VALUES OF VARIABLE
 TEMPERATURE 773.000 to 873.000 by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 793.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase			
		Fe	Mo	Cr	
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000	
		Ni	C	Mn	
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000	
		Si			
1.0000E+02	BCC_A2	0.0075000			

Gibbs Energy = -6.0958496076E+07 J System Enthalpy = 3.2274495212E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
--------	-----------	--------	--------	-------	-------

NUMBER	PHASE	STATUS	MODEL
--------	-------	--------	-------

NUMBER	SUBSTANCE	STATUS/CONSTRAINT
--------	-----------	-------------------

TEMPERATURE	:	803.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
		202.9307		
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
		11.91000		
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

STEPPED VARIABLE	INITIAL, FINAL AND STEP VALUES OF VARIABLE
TEMPERATURE	773.000 to 873.000 by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 803.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					

1.802073E+03 1.000000E+02

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	BCC_A2	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	BCC_A2	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	BCC_A2	0.0075000		

Gibbs Energy = -6.2138766091E+07 J System Enthalpy = 3.3004250291E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
--------	-----------	--------	--------	-------	-------

NUMBER	PHASE	STATUS	MODEL
--------	-------	--------	-------

NUMBER	SUBSTANCE	STATUS/CONSTRAINT
--------	-----------	-------------------

TEMPERATURE	:	813.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

STEPPED VARIABLE	INITIAL, FINAL AND STEP VALUES OF VARIABLE			
TEMPERATURE	773.000	to	873.000	by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 813.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
9.9926E+01	BCC_A2	0.6770021	0.0200001	0.1710005
7.3748E-02	FCC_A1	0.6740936	0.0199141	0.1702659
		Ni	C	Mn
9.9926E+01	BCC_A2	0.1191004	0.0000968	0.0053000
7.3748E-02	FCC_A1	0.1185887	0.0043927	0.0052772
		Si		
9.9926E+01	BCC_A2	0.0075000		
7.3748E-02	FCC_A1	0.0074678		

Gibbs Energy = -6.3328197653E+07 J System Enthalpy = 3.3748341028E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE : 823.0000
PRESSURE/Pa : 101325.0

VOLUME/m3 : undefined
 SYSTEM AMOUNT/mol : undefined
 COMP. AMOUNTS/mol : 1212.241 20.84636 328.8715
 202.9307
 COMP. AMOUNTS/mol : 0.8325701 9.647239 26.70417
 SYSTEM MASS/kg : undefined
 COMP. MASSES/kg : 67.70000 2.000000 17.10000
 11.91000
 COMP. MASSES/kg : 0.1000000E-01 0.5300000 0.7500000

STEPPED VARIABLE INITIAL, FINAL AND STEP VALUES OF VARIABLE
 TEMPERATURE 773.000 to 873.000 by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 823.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase			
		Fe	Mo	Cr	
9.9328E+01	BCC_A2	0.6770152	0.0200004	0.1710038	
6.7212E-01	FCC_A1	0.6747490	0.0199335	0.1704314	
		Ni	C	Mn	
9.9328E+01	BCC_A2	0.1191027	0.0000775	0.0053001	
6.7212E-01	FCC_A1	0.1187040	0.0034247	0.0052824	
		Si			
9.9328E+01	BCC_A2	0.0075002			

6.7212E-01 FCC_A1 0.0074751

Gibbs Energy = -6.4526984843E+07 J System Enthalpy = 3.4525503037E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	833.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

STEPPED VARIABLE	INITIAL, FINAL AND STEP VALUES OF VARIABLE			
TEMPERATURE	773.000	to	873.000	by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 833.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				

C	undef	undef	8.325701E
-01 1.000000E-02			
Mn	undef	undef	
9.647239E+00 5.300000E-01			
Si	undef	undef	
2.670417E+01 7.500000E-01			
Total			
1.802073E+03 1.000000E+02			

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
9.8254E+01	BCC_A2	0.6770287	0.0200008	0.1710072
1.7460E+00	FCC_A1	0.6753875	0.0199524	0.1705927
		Ni	C	Mn
9.8254E+01	BCC_A2	0.1191050	0.0000577	0.0053002
1.7460E+00	FCC_A1	0.1188163	0.0024816	0.0052874
		Si		
9.8254E+01	BCC_A2	0.0075003		
1.7460E+00	FCC_A1	0.0074821		

Gibbs Energy = -6.5735397590E+07 J System Enthalpy = 3.5335610495E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	843.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

STEPPED VARIABLE INITIAL, FINAL AND STEP VALUES OF VARIABLE
 TEMPERATURE 773.000 to 873.000 by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 843.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase			
		Fe	Mo	Cr	
9.5910E+01	BCC_A2	0.6770424	0.0200013	0.1710107	
4.0902E+00	FCC_A1	0.6760066	0.0199707	0.1707491	
		Ni	C	Mn	
9.5910E+01	BCC_A2	0.1191075	0.0000374	0.0053003	
4.0902E+00	FCC_A1	0.1189252	0.0015672	0.0052922	
		Si			
9.5910E+01	BCC_A2	0.0075005			
4.0902E+00	FCC_A1	0.0074890			

Gibbs Energy = -6.6953875364E+07 J System Enthalpy = 3.6212572802E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	853.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
		202.9307		
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
		11.91000		
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

STEPPED VARIABLE	INITIAL, FINAL AND STEP VALUES OF VARIABLE
TEMPERATURE	773.000 to 873.000 by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 853.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase
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	Fe	Mo	Cr
8.7565E+01 BCC_A2	0.6770563	0.0200017	0.1710142
1.2435E+01 FCC_A1	0.6766035	0.0199883	0.1708999

	Ni	C	Mn
8.7565E+01 BCC_A2	0.1191099	0.0000168	0.0053004
1.2435E+01 FCC_A1	0.1190302	0.0006856	0.0052969

	Si
8.7565E+01 BCC_A2	0.0075006
1.2435E+01 FCC_A1	0.0074956

Gibbs Energy = -6.8183859833E+07 J System Enthalpy = 3.7354204001E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	863.0000		
PRESSURE/Pa	:	101325.0		
VOLUME/m3	:	undefined		
SYSTEM AMOUNT/mol	:	undefined		
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715
202.9307				
COMP. AMOUNTS/mol	:	0.8325701	9.647239	26.70417
SYSTEM MASS/kg	:	undefined		
COMP. MASSES/kg	:	67.70000	2.000000	17.10000
11.91000				
COMP. MASSES/kg	:	0.1000000E-01	0.5300000	0.7500000

STEPPED VARIABLE	INITIAL, FINAL AND STEP VALUES OF VARIABLE			
TEMPERATURE	773.000	to	873.000	by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 863.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	FCC_A1	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	FCC_A1	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	FCC_A1	0.0075000		

Gibbs Energy = -6.9445228733E+07 J System Enthalpy = 4.1727601251E+07 J

*** PROBLEM settings ***

Changes only listed under components/phases/substances

NUMBER	COMPONENT	STATUS	AMOUNT	DELTA	REF.P
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NUMBER	PHASE	STATUS	MODEL
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NUMBER	SUBSTANCE	STATUS/CONSTRAINT
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TEMPERATURE	:	873.0000			
PRESSURE/Pa	:	101325.0			
VOLUME/m3	:	undefined			
SYSTEM AMOUNT/mol	:	undefined			
COMP. AMOUNTS/mol	:	1212.241	20.84636	328.8715	

202.9307

COMP. AMOUNTS/mol : 0.8325701 9.647239 26.70417
SYSTEM MASS/kg : undefined
COMP. MASSES/kg : 67.70000 2.000000 17.10000
11.91000
COMP. MASSES/kg : 0.1000000E-01 0.5300000 0.7500000

STEPPED VARIABLE INITIAL, FINAL AND STEP VALUES OF VARIABLE
TEMPERATURE 773.000 to 873.000 by 10.0000

*** MULTIPHASE - Stage 1* Results ***

Temperature = 873.0000 K

Fixed pressure = 1.013250E+05 Pa, 1.000000E+00 atm

Component	Ref.Phase	Chem.Pot.	Activity	Amount/mol	Mass/kg
Fe		undef	undef		
1.212241E+03	6.770000E+01				
Mo		undef	undef		
2.084636E+01	2.000000E+00				
Cr		undef	undef		
3.288715E+02	1.710000E+01				
Ni		undef	undef		
2.029307E+02	1.191000E+01				
C		undef	undef	8.325701E	
-01	1.000000E-02				
Mn		undef	undef		
9.647239E+00	5.300000E-01				
Si		undef	undef		
2.670417E+01	7.500000E-01				
Total					
1.802073E+03	1.000000E+02				

Mass/kg	Phase	Mass fraction of component within phase		
		Fe	Mo	Cr
1.0000E+02	FCC_A1	0.6770000	0.0200000	0.1710000
		Ni	C	Mn
1.0000E+02	FCC_A1	0.1191000	0.0001000	0.0053000
		Si		
1.0000E+02	FCC_A1	0.0075000		

Gibbs Energy = -7.0736645633E+07 J System Enthalpy = 4.2282911589E+07 J