

Substance		$\Delta fH^\circ$ (298.15 k)	$S^\circ$ (298.15 k)	$\Delta fG^\circ$ (298.15 k)	$C_p^\circ = a + b \cdot 10^{-3} \cdot T^{-6} \cdot 10^{-5} / T^2$			$V^\circ$ (298.15 k)	$K$
					$a$	$b$	$c$		
1		2	3	4	5	6	7	8	9
Ag	S	0	42.55	0	22.06	7.86	-0.93	10.272	1235.08
Al	S	0	28.35	0	20.67	12.38	-	9.9999	932
Al	L	-	-	-	30.96	-	-	-	4300
As	S	0	35.69	0	21.88	9.29	-	12.693	1100
Ba	S	0	62.5	0	42.89	3.36	14.12	4.386	1100
Be	S	0	9.5	0	18.74	9.29	4.50	4.880	1550
Bi	S	0	56.9	0	18.79	22.59	-	21.309	544.5
Bi	L	-	-	-	31.38	-	-	-	1800
C	S	0	5.74	0	16.86	4.77	8.54	5.298	1800
C	S	1.895	2.38	2.9				3.417	
Ca	S	0	41.6	0	16.31	22.21	-2.67	26.19	716
Ca	S	-	-	-	6.28	32.38	-10.46	-	1115
Ca	L	-	-	-	31.0	-	-	-	3300
Cl <sub>2</sub>	G	0	223.08	0	37.03	0.67	2.28	24768	1800
Co	S	0	30.04	0	19.83	16.74	-	6.67	700
Cu	S	0	33.15	0	22.63	6.28	-	7.113	1357
F <sub>2</sub>	G	0	202.795	0	35.60	1.44	4.20	24789	3000
Fe	S	0	27.475	0	-0.92	50.80	-9.56	7.092	1043
Fe	S	-	-	-	183.09	-122.51	-	-	1185
Fe	S	-	-	-	23.03	8.79	-4.98	-	1667
H <sub>2</sub>	G	0	130.68	0	27.28	3.26	-0.50	24789	3000
Hg	L	0	75.90	0	26.25	0.84	-1.31	14.822	629.81
Hg	G	-	-	-	20.79	-	-	-	2000
K	S	0	64.68	0	4.38	84.25	-	45.36	336.35
K	L	-	-	-	28.64	0.97	-3.71	-	1043.7
Mg	S	0	32.68	0	20.79	12.72	-0.17	13.996	922
Mg	L	-	-	-	34.31	-	-	-	1363
Mn	S	0	32.01	0	23.85	14.14	1.55	7.354	1000
Mo	S	0	28.57	0	18.31	9.92	-2.48	9.387	2890
Na	S	0	51.30	0	16.82	37.82	-	23.812	371.01
Na	L	-	-	-	28.85	4.52	-	-	1177
O <sub>2</sub>	G	0	205.15	0	29.96	4.18	1.67	24789	3000
Pb	S	0	64.80	0	23.56	9.75	-	18.267	600.6
Pb	L	-	-	-	32.47	-3.10	-	-	1200
S	S	0	32.054	0	14.98	26.11	-	15.511	368.54
S	S	-	-	-	25.94	-	-	-	388.36
S	L	-	-	-	36.53	-	-	-	717.8
S <sub>2</sub>	G	-128.36	228.07	-79.08	36.48	0.67	3.76	-	3000
Sb	S	0	45.52	0	23.05	7.28	-	18.178	903.65
Si	S	0	18.81	0	23.70	3.30	4.35	12.056	1690
Sn	S	0	51.18	0	20.79	19.60	-0.32	16.289	505.12
Sn	L	-	-	-	25.90	1.51	-7.76	-	2000
Sr	S	0	55.7	0	19.80	16.20	-1.92	33.921	828
Sr	S	-	-	-	24.23	14.43	-	-	1041
Sr	L	-	-	-	36.0	-	-	-	3400
Ti	S	0	30.72	0	21.97	10.54	-	10.631	1155
U	S	0	50.208	0	16.19	30.63	-2.05	12.497	941
W	S	0	32.63	0	44.77	-5.52	19.41	9.545	3000
Zn	S	0	41.63	0	22.38	10.04	-	9.162	962.37
Zn	L	-	-	-	31.38	-	-	-	1181
Zr	S	0	38.87	0	27.82	4.64	3.61	14.016	1136
CaF <sub>2</sub>	S	1229.26	68.87	1176.92	59.83	30.46	1.97	24.542	1424
HF	G	273.30	173.665	275.37	27.40	30.10	0.73	-	4000
SiF <sub>4</sub>	G	1614.94	282.17	1572.56	91.84	11.13	19.75	-	2000
NaCl	S	411.26	72.12	384.21	45.15	17.97	-	27.015	1073
KCl	S	436.47	82.59	408.55	41.38	21.76	3.22	37.524	1043

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					$a$	$b$	$c$		
1	2	3	4	5	6	7	8	9	
Al <sub>2</sub> O <sub>3</sub>	S	1675.7	50.92	1582.2	97.06	39.02	26.36	25.575	500
					122.68	6.88	50.24		1200
As <sub>2</sub> O <sub>3</sub>	S	656.97	107.41	575.96	35.02	203.34	-	51.118	548
As <sub>2</sub> O <sub>5</sub>	S	924.66	105.4	781.89	-	-	-	-	-
CO	G	110.53	197.67	137.17	28.41	-4.10	0.46		2500
CO <sub>2</sub>	G	393.51	213.79	394.37	44.22	8.79	8.62		2500
CoO	S	237.50	52.90	213.73	45.26	1.07	-6.03	16.64	1800
Co <sub>3</sub> O <sub>4</sub>	S	918.81	109.33	802.27	131.64	66.01	24.80		1000
Cu <sub>2</sub> O	S	168.61	93.14	146.03	59.12	24.22	3.34	23.437	1516,7
CuO	S	157.32	42.63	129.56	48.05	8.09	7.26	12.22	1400
FeO	S	264.00	60.80	243.35	49.22	10.17	2.07	12.00	1600
Fe <sub>0.947</sub> O	S	236.30	59.40	242.67	49.47	7.68	3.35	12.04	1652
Fe <sub>2</sub> O <sub>3</sub>	S	823.00	87.40	740.93	98.20	80.62	16.43	30.274	960
Fe <sub>3</sub> O <sub>4</sub>	S	1113.0	146.20	1009.68	79.76	225.40	-3.40	44.524	850
H <sub>2</sub> O	G	241.814	188.834	228.570	30.54	10.29	-		2750
H <sub>2</sub> O	L	285.83	69.95	237.15	42.02	6.95	-1.10	18.069	273,15
MgO	S	601.49	26.945	569.20	47.52	4.31	10.35	11.248	2000
MnO	S	385.22	59.71	362.90	46.48	8.12	3.68	13.221	1800
MnO <sub>2</sub>	S	520.03	53.05	465.14	69.45	10.21	16.23	16.61	800
Mn <sub>2</sub> O <sub>3</sub>	S	958.97	110.46	881.07	103.47	35.07	13.51	31.37	1350
Mn <sub>3</sub> O <sub>4</sub>	S	1387.83	153.97	1282.77	144.93	45.27	9.20	46.95	1445
PbO	S	219.41	66.32	189.28	36.15	32.47	-	23.91	762
PbO <sub>2</sub>	S	274.47	71.80	215.39	53.14	32.63	-	25.01	1000
Pb <sub>3</sub> O <sub>4</sub>	S	718.69	211.96	601.59	177.93	33.26	29.26	76.81	1800
SO <sub>2</sub>	G	298.81	248.22	300.09	46.19	7.86	7.70		2000
SiO <sub>2</sub>	$\alpha$	910.70	41.46	856.29	44.60	37.75	10.02	22.688	848
SiO <sub>2</sub>	$\beta$	-	-	-	58.93	10.03	-	-	1800
SnO	S	285.77	56.48	256.77	41.63	14.64	-		1273
SnO <sub>2</sub>	S	580.78	52.30	519.90	72.16	11.73	20.50	21.55	1500
UO <sub>2</sub>	S	1084.99	77.03	1031.82	77.90	8.98	15.08	24.618	2000
UO <sub>3</sub>	S	1223.82	96.11	1145.76	94.45	7.87	13.45	35.56	930
ZnO	S	350.46	43.64	320.48	48.99	5.10	9.12	14.338	2000
Al(OH) <sub>3</sub>	S	1293.13	68.44	1154.89	56.02	168.87	12.80	31.956	500
AlO(OH)	S	999.80	35.34	921.30	46.94	64.18	11.30	17.76	600
AlO(OH)	S	990.40	48.43	915.90	56.23	82.93	13.60	19.535	600
FeO(OH)	S	558.98	67.36	490.23	80.19	28.51	12.63	20.82	500
Mg(OH) <sub>2</sub>	S	925.307	63.18	834.27	100.6	18.31	25.26	24.63	1000
Ag <sub>2</sub> S	S	32.35	142.84	40.01	42.38	110.46	-	34.19	452
AsS	S	71.34	63.51	70.08				29.8	
As <sub>2</sub> S <sub>3</sub>	S	169.03	163.60	167.85				70.51	
Bi <sub>2</sub> S <sub>3</sub>	S	143.09	200.40	140.24	90.37	54.81	-	75.52	1036
CoS	S	82.84	62.3	82.90					
CoS <sub>2</sub>	S	134.31	103.3	137.04					
Co <sub>3</sub> S <sub>4</sub>	S	307.10	274.5	323.84					
CuS	S	48.575	67.15	49.16	43.05	20.17	1.38	20.42	780
Cu <sub>2</sub> S	S	80.115	116.15	85.43	21.921	148.28	-9.58	27.475	276
		-	-	-	05.6	-26.11	-6.61		720
FeS	S	101.30	60.31	101.53	-33.77	246.87	-9.52	18.2	411
		-	-	-	72.8	-	-		598
		-	-	-	51.04	9.96	-		1463
Fe <sub>0.877</sub> S	S	95.0	60.79	96.38	17.57	90.09	-4.83		598
		-	-	-	50.2	9.95	-		1423
FeS <sub>2</sub>	S	171.0	52.93	159.48	72.39	8.85	11.43	23.94	1500
H <sub>2</sub> S	G	20.63	205.67	33.43	32.68	12.38	1.925		2300

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					$a$	$b$	$c$		
1	2	3	4	5	6	7	8	9	
HgS	S	58.16	82.42	50.55	45.60	15.27	-	28.416	853
MnS	S	218.865	78.2	218.08	47.70	7.53	-	21.46	1803
MnS <sub>2</sub>	S	244.60	99.91	245.73				34.20	
MoS <sub>2</sub>	S	306.27	62.57	297.29	46.86	56.48	-	32.02	1200
Pb	S	99.84	91.2	98.15	44.60	16.40	-	31.49	900
Sb <sub>3</sub> S <sub>2</sub>	S	157.74	182.0	156.19	101.25	55.23	-	73.41	821
SnS	S	106.54	76.82	104.63	35.69	31.30	-3.76	29.01	875
ZnS	S	206.90	58.66	202.42	49.25	5.27	4.85	23.81	1300
ZnS	S	194.57	58.84	190.14	49.45	4.85	4.35	23.846	1250
CuFeS <sub>2</sub>	S	185.99	130.33	187.66	87.0	53.55	5.61	42.83	830
FeAsS	S	105.44	108.36	109.36	62.88	40.85	1.42	26.42	1000
Cu <sub>5</sub> FeS <sub>4</sub>	S	334.39	408.43	360.34	208.2	146.77	5.65	98.6	485
					-143.55	1033.4	-		540
					336.1	-8.53	-		1200
CaSO <sub>4</sub>	S	1434.11	106.69	1321.63	72.18	97.34	1.37	45.94	1400
CaSO <sub>4</sub> ·2H <sub>2</sub> O	S	2022.63	194.14	1797.13	91.38	317.98	-	74.69	400
BaSO <sub>4</sub>	S	1459.0	132.1	1347.86	112.42	51.55	22.84	52.10	1423
PbSO <sub>4</sub>	S	919.94	148.49	813.01	46.83	127.75	-17.24	47.95	1100
SrSO <sub>4</sub>	S	1458.0	121.00	1345.58	109.69	53.43	20.99	46.25	1430
CaWO <sub>4</sub>	S	1645.15	126.40	1538.37	110.79	45.81	-	47.05	1073
FeWO <sub>4</sub>	S	1154.78	131.80	1053.82	109.20	52.72	-	40.38	1100
MnWO <sub>4</sub>	S	1305.41	132.50	1163.81	108.78	51.30	-	41.89	1073
BaCO <sub>3</sub>	S	1210.85	112.13	1132.19	89.96	46.27	16.36	45.81	1079
CaCO <sub>3</sub>	S	1207.37	91.71	1128.85	99.55	27.14	21.48	36.934	1403
CaCO <sub>3</sub>	S	1207.43	87.99	1127.80	81.53	45.67	11.40	35.15	1000
CaMg(CO <sub>3</sub> ) <sub>2</sub>	S	2329.86	155.18	2167.07	187.07	74.39	45.81	64.34	1000
Cu <sub>2</sub> (CO <sub>3</sub> )(OH) <sub>2</sub>	S	1053.95	240.75	912.39				54.86	
Cu <sub>3</sub> (CO <sub>3</sub> ) <sub>2</sub> (OH) <sub>2</sub>	S	1632.18	420	1440.8				91.01	
FeCO <sub>3</sub>	S	736.98	105.0	666.64	48.66	112.13	-	29.378	855
MgCO <sub>3</sub>	S	1113.28	65.09	1029.48	73.33	63.99	14.49	28.018	1263
MnCO <sub>3</sub>	S	889.27	100.0	816.08	123.39	-2.94	41.78	31.073	700
PbCO <sub>3</sub>	S	699.60	131.0	625.88	51.84	119.66	-	40.6	800
SrCO <sub>3</sub>	S	1218.68	97.07	1137.55	98.41	26.44	21.25	39.01	1197
UO <sub>2</sub> CO <sub>3</sub>	S	1696.19	146.44	1570.23					
ZnCO <sub>3</sub>	S	812.78	82.42	731.48	38.91	138.07	-	28.275	780
Be <sub>2</sub> SiO <sub>4</sub>	S	2144.72	64.43	2030.30	103.05	23.64	58.78	37.19	1000
Ca <sub>2</sub> SiO <sub>4</sub>	S	2306.7	126.72	2191.74	145.90	40.75	26.19	51.6	970
Ca <sub>2</sub> SiO <sub>4</sub>	S	2316.53	120.5	2199.71	133.30	51.55	19.41	59.11	1120
Fe <sub>2</sub> SiO <sub>4</sub>	S	1479.36	148.32	1379.26	152.76	39.16	28.03	46.39	1490
Mg <sub>2</sub> SiO <sub>4</sub>	S	2174.69	95.19	2055.65	149.83	27.36	35.65	43.79	1800
Mn <sub>2</sub> SiO <sub>4</sub>	S	1732.0	155.9	1631.45	123.01	52.72	-	48.61	1430
ZrSiO <sub>4</sub>	S	2033.40	84.03	1918.92	131.71	16.40	33.81	39.26	1800
Al <sub>2</sub> (SiO <sub>4</sub> )O	S	2594.27	84.47	2444.03	171.70	29.18	52.28	44.09	1400
Al <sub>2</sub> (SiO <sub>4</sub> )O	S	2590.27	93.77	2442.80	172.47	26.12	50.99	51.56	1400
Al <sub>2</sub> (SiO <sub>4</sub> )O	S	2587.77	96.09	2441.0	164.84	33.80	45.99	50.018	1500
Ca <sub>3</sub> Al <sub>2</sub> (SiO <sub>4</sub> ) <sub>3</sub>	S	6636.34	255.5	6274.58	435.21	71.182	114.30	125.30	1000
Fe <sub>3</sub> Al <sub>2</sub> (SiO <sub>4</sub> ) <sub>3</sub>	S	5287.7	307.1	4953.96	467.52	50.88	143.76	115.27	1000
Mg <sub>3</sub> Al <sub>2</sub> (SiO <sub>4</sub> ) <sub>3</sub>	S	6286.5	248.1	5930.52	366.14	137.11	77.95	113.27	1000
CaTi(SiO <sub>4</sub> )O	S	2601.40	129.2	2459.84	176.73	23.85	39.90	55.65	1470
Ca <sub>2</sub> Mg(Si <sub>2</sub> O <sub>7</sub> )	S	3876.52	209.33	3679.09	251.42	47.70	47.70	92.81	1700
CaSiO <sub>3</sub>	S	1634.77	81.03	1549.17	111.46	15.06	27.28	39.93	1400
MnSiO <sub>3</sub>	S	1319.35	102.5	1243.01	110.54	16.23	25.77	35.158	1500
PbSiO <sub>3</sub>	S	1145.70	109.62	1061.71	159.24	40.58	58.20	43.648	1000
MgSiO <sub>3</sub>	S	1544.84	67.77	1457.94	102.72	19.83	26.27	31.27	1400
CaMgSi <sub>2</sub> O <sub>6</sub>	S	3203.26	143.09	3029.06	221.21	32.80	65.68	66.09	1400

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					$a$	$b$	$c$			
1		2	3	4	5	6	7	8	9	
	Mg <sub>2</sub> Al <sub>3</sub> (AlSi <sub>5</sub> O <sub>18</sub> )	S	9161.52	407.2	8651.10	601.78	107.95	161.50	233.22	1700
	Fe <sub>2</sub> Al <sub>3</sub> (AlSi <sub>5</sub> O <sub>18</sub> )	S	8460.20	469.6	7971.49	618.02	111.0	156.52	232.08	1273
	NaAlSi <sub>2</sub> O <sub>6</sub>	S	3029.40	133.47	2850.73	201.50	47.78	49.66	60.4	1200
	Ca <sub>2</sub> Mg <sub>5</sub> (Si <sub>4</sub> O <sub>11</sub> ) <sub>2</sub> (OH) <sub>2</sub>	S	12374.52	548.90	11619.85	787.52	239.72	187.53	272.92	800
	Mg <sub>7</sub> (Si <sub>4</sub> O <sub>11</sub> ) <sub>2</sub> (OH) <sub>2</sub>	S	12083.92	530.82	11356.17	755.97	253.44	160.92	264.46	903
	Al <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>	S	4119.78	204.97	3799.60	304.47	122.17	90.04	99.52	1000
	Al <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>	S	4118.47	197.06	3795.94				99.3	
	Al <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>	S	4101.03	203.33	3780.36				99.4	
	Mg <sub>3</sub> (Si <sub>4</sub> O <sub>10</sub> )(OH) <sub>2</sub>	S	5899.51	261.42	5519.84	416.48	90.29	107.11	136.25	1000
	Mg <sub>3</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>	S	4363.22	221.33	4035.60	317.32	132.21	73.55	107.15	1000
	CaAl <sub>2</sub> (AlSi <sub>2</sub> O <sub>10</sub> )(OH) <sub>2</sub>	S	6239.61	263.64	5854.83	428.86	68.41	117.36	133.8	848
					415.51	94.60	128.66			1000
	Ca <sub>2</sub> Al(AlSi <sub>3</sub> O <sub>10</sub> )(OH) <sub>2</sub>	S	6193.63	292.74	5816.43	383.25	158.24	82.01	140.33	848
					423.29	79.66	48.12			1000
	Ca <sub>2</sub> Al <sub>3</sub> (SiO <sub>4</sub> ) <sub>3</sub> (OH)	S	6891.12	295.88	6495.29	443.99	105.49	113.57	136.52	730
	Ca <sub>2</sub> FeAl <sub>2</sub> (SiO <sub>4</sub> ) <sub>3</sub> (OH)	S	6473.2	314.6	6083.22	481.39	61.46	121.00	139.2	1100
	CaAl <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> (OH) <sub>2</sub> ·H <sub>2</sub> O	S	4864.03	231.33	4508.73	283.71	219.99	63.94	101.32	600
	Mg <sub>5</sub> Al(AlSi <sub>3</sub> O <sub>10</sub> )(OH) <sub>8</sub>	S	8879.72	471.62	8231.56	670.36	189.07	166.02	211.54	1000
	NaAl <sub>2</sub> (AlSi <sub>3</sub> O <sub>10</sub> )(OH) <sub>2</sub>	S	5938.85	277.82	5558.26	407.65	102.51	110.62	132.53	1000
	KAl <sub>2</sub> (AlSi <sub>3</sub> O <sub>10</sub> )(OH) <sub>2</sub>	S	5982.69	287.70	5601.05	408.19	110.37	106.44	140.71	1000
	KMg <sub>3</sub> (AlSi <sub>3</sub> O <sub>10</sub> )(OH) <sub>2</sub>	S	6229.86	318.4	5845.05	420.95	120.42	89.96	149.91	1000
	NaAlSi <sub>3</sub> O <sub>8</sub>	S	3935.12	207.4	3711.73	258.15	58.16	62.80	100.07	1400
	NaAlSi <sub>2</sub> O <sub>6</sub> ·H <sub>2</sub> O	S	3297.60	226.75	3077.20	109.97	293.4	12.51	97.1	600
	NaAlSiO <sub>4</sub>	S	2092.11	124.35	1977.50	27.74	295.4	-	54.16	467
					112.09	67.11	-			1180
	KAlSi <sub>3</sub> O <sub>8</sub>	S	3975.01	214.20	3749.65	320.57	18.04	125.29	108.72	1400
	KAlSi <sub>2</sub> O <sub>6</sub>	S	3038.65	200.20	2875.89	148.42	134.25	21.64	88.39	955
					196.47	27.67	122.61			1800
	CaAl <sub>2</sub> Si <sub>2</sub> O <sub>8</sub>	S	4227.83	199.29	4002.07	264.89	61.90	64.60	100.79	1700
	CaTiO <sub>3</sub>	S	1660.63	93.64	1575.24	127.49	5.69	27.99	33.626	1530
	FeTiO <sub>3</sub>	S	1236.62	105.86	1159.08	116.61	18.66	20.04	31.69	1640
	Fe(AlO <sub>2</sub> ) <sub>2</sub>	S	1966.48	106.27	1850.74	90.25	111.67	-	40.75	1298
	Mg(AlO <sub>2</sub> ) <sub>2</sub>	S	2299.32	80.63	2174.38	153.97	26.78	40.90	39.71	1800
	Al <sub>2</sub> Si <sub>4</sub> O <sub>10</sub> (OH) <sub>2</sub>	S	5642.02	239.42	5268.11	332.34	164.03	72.308	125.90	800