

H₂ Ref.: <http://cea.grc.nasa.gov/>

T K	C _p J/mol-K	H-H298.15 kJ/mol	S J/mol-K	-(G-H298.15)/T J/mol-K	H kJ/mol	Δ H _f kJ/mol	log K
0	0.	-8.468	0.	INFINITE	-8.468	0	INFINITE
200	27.445	-2.775	119.409	133.286	-2.775	0	0
220	27.870	-2.222	122.046	132.146	-2.222	0	0
240	28.213	-1.661	124.486	131.407	-1.661	0	0
260	28.483	-1.094	126.756	130.963	-1.094	0	0
280	28.691	-0.522	128.874	130.739	-0.522	0	0
298.15	28.836	0.000	130.681	130.681	0.000	0	0
300	28.849	0.053	130.859	130.682	0.053	0	0
320	28.967	0.632	132.725	130.752	0.632	0	0
340	29.053	1.212	134.484	130.920	1.212	0	0
360	29.115	1.794	136.147	131.165	1.794	0	0
380	29.158	2.376	137.722	131.469	2.376	0	0
400	29.189	2.960	139.218	131.819	2.960	0	0
420	29.210	3.544	140.643	132.205	3.544	0	0
440	29.225	4.128	142.002	132.620	4.128	0	0
460	29.236	4.713	143.302	133.057	4.713	0	0
480	29.245	5.298	144.546	133.510	5.298	0	0
500	29.254	5.883	145.740	133.975	5.883	0	0
520	29.263	6.468	146.888	134.450	6.468	0	0
540	29.273	7.053	147.992	134.931	7.053	0	0
560	29.286	7.639	149.057	135.417	7.639	0	0
580	29.301	8.225	150.085	135.905	8.225	0	0
600	29.318	8.811	151.079	136.394	8.811	0	0
620	29.338	9.397	152.040	136.883	9.397	0	0
640	29.361	9.984	152.972	137.372	9.984	0	0
660	29.386	10.572	153.876	137.858	10.572	0	0
680	29.414	11.160	154.754	138.342	11.160	0	0
700	29.444	11.748	155.607	138.823	11.748	0	0
720	29.477	12.337	156.437	139.301	12.337	0	0
740	29.512	12.927	157.245	139.775	12.927	0	0
760	29.549	13.518	158.032	140.245	13.518	0	0
780	29.588	14.109	158.800	140.711	14.109	0	0
800	29.629	14.701	159.550	141.173	14.701	0	0
820	29.673	15.295	160.282	141.630	15.295	0	0
840	29.719	15.888	160.998	142.083	15.888	0	0
860	29.767	16.483	161.697	142.531	16.483	0	0
880	29.819	17.079	162.382	142.974	17.079	0	0
900	29.873	17.676	163.053	143.413	17.676	0	0
920	29.931	18.274	163.710	143.847	18.274	0	0
940	29.992	18.873	164.355	144.277	18.873	0	0
960	30.058	19.474	164.987	144.702	19.474	0	0
980	30.129	20.076	165.607	145.122	20.076	0	0
1000	30.206	20.679	166.217	145.538	20.679	0	0

H₂

T K	Cp J/mol-K	H-H298.15 kJ/mol	S J/mol-K	-(G-H298.15)/T J/mol-K	H kJ/mol	Δ Hf kJ/mol	log K
1020	30.272	21.284	166.816	145.949	21.284	0	0
1040	30.341	21.890	167.404	146.356	21.890	0	0
1060	30.414	22.497	167.983	146.759	22.497	0	0
1080	30.489	23.107	168.552	147.157	23.107	0	0
1100	30.567	23.717	169.112	147.551	23.717	0	0
1120	30.647	24.329	169.663	147.941	24.329	0	0
1140	30.729	24.943	170.207	148.327	24.943	0	0
1160	30.812	25.558	170.742	148.709	25.558	0	0
1180	30.897	26.175	171.269	149.087	26.175	0	0
1200	30.983	26.794	171.789	149.461	26.794	0	0
1220	31.069	27.415	172.302	149.831	27.415	0	0
1240	31.157	28.037	172.808	150.197	28.037	0	0
1260	31.244	28.661	173.307	150.560	28.661	0	0
1280	31.333	29.287	173.800	150.920	29.287	0	0
1300	31.421	29.914	174.286	151.275	29.914	0	0
1320	31.510	30.544	174.767	151.628	30.544	0	0
1340	31.599	31.175	175.241	151.977	31.175	0	0
1360	31.688	31.808	175.710	152.322	31.808	0	0
1380	31.777	32.442	176.173	152.664	32.442	0	0
1400	31.866	33.079	176.631	153.004	33.079	0	0
1420	31.954	33.717	177.084	153.340	33.717	0	0
1440	32.042	34.357	177.531	153.672	34.357	0	0
1460	32.130	34.999	177.974	154.002	34.999	0	0
1480	32.218	35.642	178.412	154.329	35.642	0	0
1500	32.305	36.287	178.845	154.653	36.287	0	0
1520	32.391	36.934	179.273	154.974	36.934	0	0
1540	32.477	37.583	179.697	155.293	37.583	0	0
1560	32.563	38.233	180.117	155.608	38.233	0	0
1580	32.648	38.885	180.532	155.921	38.885	0	0
1600	32.732	39.539	180.943	156.231	39.539	0	0
1620	32.816	40.195	181.351	156.539	40.195	0	0
1640	32.899	40.852	181.754	156.844	40.852	0	0
1660	32.981	41.511	182.153	157.147	41.511	0	0
1680	33.063	42.171	182.548	157.447	42.171	0	0
1700	33.144	42.833	182.940	157.744	42.833	0	0
1720	33.224	43.497	183.328	158.039	43.497	0	0
1740	33.304	44.162	183.713	158.332	44.162	0	0
1760	33.383	44.829	184.094	158.623	44.829	0	0
1780	33.461	45.497	184.472	158.911	45.497	0	0
1800	33.539	46.167	184.846	159.197	46.167	0	0

H₂

T K	Cp J/mol-K	H-H298.15 kJ/mol	S J/mol-K	-(G-H298.15)/T J/mol-K	H kJ/mol	Δ Hf kJ/mol	log K
1820	33.616	46.839	185.217	159.481	46.839	0	0
1840	33.692	47.512	185.585	159.763	47.512	0	0
1860	33.768	48.187	185.949	160.043	48.187	0	0
1880	33.842	48.863	186.311	160.320	48.863	0	0
1900	33.916	49.540	186.669	160.596	49.540	0	0
1920	33.990	50.219	187.025	160.869	50.219	0	0
1940	34.062	50.900	187.378	161.141	50.900	0	0
1960	34.134	51.582	187.727	161.410	51.582	0	0
1980	34.205	52.265	188.074	161.678	52.265	0	0
2000	34.276	52.950	188.418	161.943	52.950	0	0
2020	34.346	53.636	188.760	162.207	53.636	0	0
2040	34.415	54.324	189.098	162.469	54.324	0	0
2060	34.483	55.013	189.435	162.729	55.013	0	0
2080	34.551	55.703	189.768	162.988	55.703	0	0
2100	34.618	56.395	190.099	163.244	56.395	0	0
2120	34.685	57.088	190.427	163.499	57.088	0	0
2140	34.751	57.782	190.753	163.752	57.782	0	0
2160	34.816	58.478	191.077	164.004	58.478	0	0
2180	34.880	59.175	191.398	164.254	59.175	0	0
2200	34.944	59.873	191.717	164.502	59.873	0	0
2220	35.007	60.573	192.034	164.749	60.573	0	0
2240	35.070	61.274	192.348	164.994	61.274	0	0
2260	35.132	61.976	192.660	165.237	61.976	0	0
2280	35.194	62.679	192.970	165.479	62.679	0	0
2300	35.254	63.383	193.277	165.719	63.383	0	0
2320	35.315	64.089	193.583	165.958	64.089	0	0
2340	35.374	64.796	193.886	166.196	64.796	0	0
2360	35.433	65.504	194.187	166.432	65.504	0	0
2380	35.492	66.213	194.487	166.666	66.213	0	0
2400	35.550	66.924	194.784	166.899	66.924	0	0
2420	35.608	67.635	195.079	167.131	67.635	0	0
2440	35.665	68.348	195.373	167.361	68.348	0	0
2460	35.721	69.062	195.664	167.590	69.062	0	0
2480	35.777	69.777	195.953	167.818	69.777	0	0
2500	35.832	70.493	196.241	168.044	70.493	0	0
2520	35.887	71.210	196.527	168.269	71.210	0	0
2540	35.942	71.928	196.811	168.492	71.928	0	0
2560	35.996	72.648	197.093	168.715	72.648	0	0
2580	36.049	73.368	197.373	168.936	73.368	0	0
2600	36.102	74.090	197.652	169.156	74.090	0	0

H₂

T K	Cp J/mol-K	H-H298.15 kJ/mol	S J/mol-K	-(G-H298.15)/T J/mol-K	H kJ/mol	Δ Hf kJ/mol	log K
2620	36.155	74.812	197.929	169.374	74.812	0	0
2640	36.207	75.536	198.204	169.592	75.536	0	0
2660	36.258	76.261	198.477	169.808	76.261	0	0
2680	36.310	76.986	198.749	170.023	76.986	0	0
2700	36.361	77.713	199.019	170.236	77.713	0	0
2720	36.411	78.441	199.288	170.449	78.441	0	0
2740	36.461	79.169	199.555	170.661	79.169	0	0
2760	36.511	79.899	199.820	170.871	79.899	0	0
2780	36.560	80.630	200.084	171.080	80.630	0	0
2800	36.609	81.361	200.346	171.288	81.361	0	0
2820	36.657	82.094	200.607	171.495	82.094	0	0
2840	36.705	82.828	200.866	171.701	82.828	0	0
2860	36.753	83.562	201.124	171.906	83.562	0	0
2880	36.801	84.298	201.380	172.110	84.298	0	0
2900	36.848	85.034	201.635	172.313	85.034	0	0
2920	36.894	85.772	201.888	172.514	85.772	0	0
2940	36.941	86.510	202.140	172.715	86.510	0	0
2960	36.987	87.249	202.391	172.915	87.249	0	0
2980	37.033	87.990	202.640	173.113	87.990	0	0
3000	37.078	88.731	202.888	173.311	88.731	0	0
3020	37.123	89.473	203.134	173.508	89.473	0	0
3040	37.168	90.216	203.380	173.703	90.216	0	0
3060	37.213	90.959	203.623	173.898	90.959	0	0
3080	37.257	91.704	203.866	174.092	91.704	0	0
3100	37.301	92.450	204.107	174.285	92.450	0	0
3120	37.345	93.196	204.347	174.477	93.196	0	0
3140	37.389	93.944	204.586	174.668	93.944	0	0
3160	37.432	94.692	204.824	174.858	94.692	0	0
3180	37.475	95.441	205.060	175.047	95.441	0	0
3200	37.518	96.191	205.295	175.235	96.191	0	0
3220	37.560	96.942	205.529	175.423	96.942	0	0
3240	37.603	97.693	205.762	175.609	97.693	0	0
3260	37.645	98.446	205.993	175.795	98.446	0	0
3280	37.687	99.199	206.223	175.980	99.199	0	0
3300	37.728	99.953	206.453	176.164	99.953	0	0
3320	37.770	100.708	206.681	176.347	100.708	0	0
3340	37.811	101.464	206.908	176.529	101.464	0	0
3360	37.852	102.220	207.134	176.711	102.220	0	0
3380	37.893	102.978	207.358	176.892	102.978	0	0
3400	37.934	103.736	207.582	177.071	103.736	0	0

H₂

T K	Cp J/mol-K	H-H298.15 kJ/mol	S J/mol-K	-(G-H298.15)/T J/mol-K	H kJ/mol	Δ Hf kJ/mol	log K
3420	37.974	104.495	207.805	177.251	104.495	0	0
3440	38.015	105.255	208.026	177.429	105.255	0	0
3460	38.055	106.016	208.247	177.606	106.016	0	0
3480	38.095	106.777	208.466	177.783	106.777	0	0
3500	38.135	107.540	208.685	177.959	107.540	0	0
3520	38.174	108.303	208.902	178.134	108.303	0	0
3540	38.214	109.067	209.118	178.309	109.067	0	0
3560	38.253	109.831	209.334	178.482	109.831	0	0
3580	38.292	110.597	209.548	178.655	110.597	0	0
3600	38.331	111.363	209.762	178.827	111.363	0	0
3620	38.370	112.130	209.974	178.999	112.130	0	0
3640	38.409	112.898	210.186	179.170	112.898	0	0
3660	38.448	113.666	210.396	179.340	113.666	0	0
3680	38.486	114.436	210.606	179.509	114.436	0	0
3700	38.525	115.206	210.815	179.678	115.206	0	0
3720	38.563	115.977	211.022	179.846	115.977	0	0
3740	38.601	116.748	211.229	180.013	116.748	0	0
3760	38.639	117.521	211.435	180.180	117.521	0	0
3780	38.677	118.294	211.640	180.346	118.294	0	0
3800	38.715	119.068	211.844	180.511	119.068	0	0
3820	38.752	119.842	212.048	180.675	119.842	0	0
3840	38.790	120.618	212.250	180.839	120.618	0	0
3860	38.827	121.394	212.452	181.003	121.394	0	0
3880	38.865	122.171	212.653	181.165	122.171	0	0
3900	38.902	122.949	212.853	181.327	122.949	0	0
3920	38.939	123.727	213.052	181.489	123.727	0	0
3940	38.976	124.506	213.250	181.649	124.506	0	0
3960	39.013	125.286	213.447	181.809	125.286	0	0
3980	39.050	126.067	213.644	181.969	126.067	0	0
4000	39.087	126.848	213.840	182.128	126.848	0	0
4020	39.123	127.630	214.035	182.286	127.630	0	0
4040	39.160	128.413	214.229	182.444	128.413	0	0
4060	39.196	129.197	214.423	182.601	129.197	0	0
4080	39.233	129.981	214.615	182.757	129.981	0	0
4100	39.269	130.766	214.807	182.913	130.766	0	0
4120	39.305	131.552	214.998	183.068	131.552	0	0
4140	39.341	132.338	215.189	183.223	132.338	0	0
4160	39.377	133.125	215.378	183.377	133.125	0	0
4180	39.413	133.913	215.567	183.531	133.913	0	0
4200	39.449	134.702	215.756	183.684	134.702	0	0

H₂

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4220	39.485	135.491	215.943	183.836	135.491	0	0
4240	39.520	136.281	216.130	183.988	136.281	0	0
4260	39.556	137.072	216.316	184.139	137.072	0	0
4280	39.591	137.863	216.501	184.290	137.863	0	0
4300	39.627	138.656	216.686	184.440	138.656	0	0
4320	39.662	139.449	216.870	184.590	139.449	0	0
4340	39.697	140.242	217.053	184.739	140.242	0	0
4360	39.732	141.036	217.236	184.888	141.036	0	0
4380	39.767	141.831	217.418	185.036	141.831	0	0
4400	39.802	142.627	217.599	185.184	142.627	0	0
4420	39.837	143.424	217.780	185.331	143.424	0	0
4440	39.872	144.221	217.959	185.477	144.221	0	0
4460	39.906	145.018	218.139	185.623	145.018	0	0
4480	39.941	145.817	218.317	185.769	145.817	0	0
4500	39.975	146.616	218.495	185.914	146.616	0	0
4520	40.009	147.416	218.673	186.059	147.416	0	0
4540	40.043	148.216	218.849	186.203	148.216	0	0
4560	40.077	149.018	219.026	186.346	149.018	0	0
4580	40.111	149.819	219.201	186.489	149.819	0	0
4600	40.145	150.622	219.376	186.632	150.622	0	0
4620	40.179	151.425	219.550	186.774	151.425	0	0
4640	40.212	152.229	219.724	186.916	152.229	0	0
4660	40.246	153.034	219.897	187.057	153.034	0	0
4680	40.279	153.839	220.069	187.198	153.839	0	0
4700	40.312	154.645	220.241	187.338	154.645	0	0
4720	40.346	155.452	220.412	187.478	155.452	0	0
4740	40.378	156.259	220.583	187.617	156.259	0	0
4760	40.411	157.067	220.753	187.756	157.067	0	0
4780	40.444	157.875	220.923	187.894	157.875	0	0
4800	40.476	158.684	221.091	188.032	158.684	0	0
4820	40.509	159.494	221.260	188.170	159.494	0	0
4840	40.541	160.305	221.428	188.307	160.305	0	0
4860	40.573	161.116	221.595	188.443	161.116	0	0
4880	40.605	161.928	221.762	188.580	161.928	0	0
4900	40.637	162.740	221.928	188.715	162.740	0	0
4920	40.668	163.553	222.093	188.851	163.553	0	0
4940	40.700	164.367	222.258	188.986	164.367	0	0
4960	40.731	165.181	222.423	189.120	165.181	0	0
4980	40.762	165.996	222.587	189.254	165.996	0	0
5000	40.793	166.812	222.750	189.388	166.812	0	0

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5020	40.824	167.628	222.913	189.521	167.628	0	0
5040	40.854	168.445	223.076	189.654	168.445	0	0
5060	40.884	169.262	223.237	189.786	169.262	0	0
5080	40.914	170.080	223.399	189.918	170.080	0	0
5100	40.944	170.899	223.560	190.050	170.899	0	0
5120	40.974	171.718	223.720	190.181	171.718	0	0
5140	41.003	172.537	223.880	190.312	172.537	0	0
5160	41.033	173.358	224.039	190.442	173.358	0	0
5180	41.061	174.179	224.198	190.573	174.179	0	0
5200	41.090	175.000	224.356	190.702	175.000	0	0
5220	41.119	175.822	224.514	190.831	175.822	0	0
5240	41.147	176.645	224.671	190.960	176.645	0	0
5260	41.175	177.468	224.828	191.089	177.468	0	0
5280	41.203	178.292	224.984	191.217	178.292	0	0
5300	41.230	179.116	225.140	191.345	179.116	0	0
5320	41.257	179.941	225.295	191.472	179.941	0	0
5340	41.284	180.767	225.450	191.599	180.767	0	0
5360	41.311	181.593	225.605	191.725	181.593	0	0
5380	41.337	182.419	225.759	191.852	182.419	0	0
5400	41.363	183.246	225.912	191.978	183.246	0	0
5420	41.389	184.074	226.065	192.103	184.074	0	0
5440	41.414	184.902	226.217	192.228	184.902	0	0
5460	41.439	185.730	226.369	192.353	185.730	0	0
5480	41.464	186.559	226.521	192.477	186.559	0	0
5500	41.488	187.389	226.672	192.601	187.389	0	0
5520	41.512	188.219	226.823	192.725	188.219	0	0
5540	41.536	189.049	226.973	192.849	189.049	0	0
5560	41.559	189.880	227.123	192.972	189.880	0	0
5580	41.582	190.712	227.272	193.094	190.712	0	0
5600	41.604	191.543	227.421	193.217	191.543	0	0
5620	41.627	192.376	227.569	193.339	192.376	0	0
5640	41.648	193.208	227.717	193.460	193.208	0	0
5660	41.670	194.042	227.864	193.582	194.042	0	0
5680	41.691	194.875	228.012	193.702	194.875	0	0
5700	41.711	195.709	228.158	193.823	195.709	0	0
5720	41.731	196.544	228.304	193.943	196.544	0	0
5740	41.751	197.379	228.450	194.063	197.379	0	0
5760	41.770	198.214	228.595	194.183	198.214	0	0
5780	41.789	199.049	228.740	194.302	199.049	0	0
5800	41.807	199.885	228.884	194.421	199.885	0	0

H₂

T K	Cp J/mol-K	H-H298.15 kJ/mol	S J/mol-K	-(G-H298.15)/T J/mol-K	H kJ/mol	Δ Hf kJ/mol	log K
5820	41.825	200.722	229.028	194.540	200.722	0	0
5840	41.842	201.558	229.172	194.658	201.558	0	0
5860	41.859	202.395	229.315	194.776	202.395	0	0
5880	41.875	203.233	229.458	194.894	203.233	0	0
5900	41.891	204.070	229.600	195.012	204.070	0	0
5920	41.906	204.908	229.742	195.129	204.908	0	0
5940	41.921	205.746	229.883	195.245	205.746	0	0
5960	41.935	206.585	230.024	195.362	206.585	0	0
5980	41.948	207.424	230.164	195.478	207.424	0	0
6000	41.962	208.263	230.304	195.594	208.263	0	0