STANDARD THERMODYNAMIC PROPERTIES OF CHEMICAL SUBSTANCES

This table gives the standard state chemical thermodynamic properties of about 2500 individual substances in the crystalline, liquid, and gaseous states. Substances are listed by molecular formula in a modified Hill order; all substances not containing carbon appear first, followed by those that contain carbon. The properties tabulated are:

- $\Delta_f H°$ Standard molar enthalpy (heat) of formation at 298.15 K in kJ/mol
- $\Delta_f G°$ Standard molar Gibbs energy of formation at 298.15 K in kJ/mol
- $S°$ Standard molar entropy at 298.15 K in J/mol K
- C_p Molar heat capacity at constant pressure at 298.15 K in J/mol K

The standard state pressure is 100 kPa (1 bar). The standard states are defined for different phases by:

- The standard state of a pure gaseous substance is that of the substance as a (hypothetical) ideal gas at the standard state pressure.
- The standard state of a pure liquid substance is that of the liquid under the standard state pressure.
- The standard state of a pure crystalline substance is that of the crystalline substance under the standard state pressure.

An entry of 0.0 for $\Delta_f H°$ for an element indicates the reference state of that element. See References 1 and 2 for further information on reference states. A blank means no value is available.

The data are derived from the sources listed in the references, from other papers appearing in the *Journal of Physical and Chemical Reference Data*, and from the primary research literature. We are indebted to M. V. Korobov for providing data on fullerene compounds.

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		Crystal				Liquid				Gas			
Molecular formula	**Name**	**$\Delta_f H°$ kJ/mol**	**$\Delta_f G°$ kJ/mol**	**$S°$ J/mol K**	**C_p J/mol K**	**$\Delta_f H°$ kJ/mol**	**$\Delta_f G°$ kJ/mol**	**$S°$ J/mol K**	**C_p J/mol K**	**$\Delta_f H°$ kJ/mol**	**$\Delta_f G°$ kJ/mol**	**$S°$ J/mol K**	**C_p J/mol K**
Substances not containing carbon:													
Ac	Actinium	0.0		56.5	27.2					406.0	366.0	188.1	20.8
Ag	Silver	0.0		42.6	25.4					284.9	246.0	173.0	20.8
AgBr	Silver(I) bromide	-100.4	-96.9	107.1	52.4								
$AgBrO_3$	Silver(I) bromate	-10.5	71.3	151.9									
AgCl	Silver(I) chloride	-127.0	-109.8	96.3	50.8								
$AgClO_3$	Silver(I) chlorate	-30.3	64.5	142.0									
$AgClO_4$	Silver(I) perchlorate	-31.1											
AgF	Silver(I) fluoride	-204.6											
AgF_2	Silver(II) fluoride	-360.0											
AgI	Silver(I) iodide	-61.8	-66.2	115.5	56.8								
$AgIO_3$	Silver(I) iodate	-171.1	-93.7	149.4	102.9								
$AgNO_3$	Silver(I) nitrate	-124.4	-33.4	140.9	93.1								
Ag_2	Disilver									410.0	358.8	257.1	37.0
Ag_2CrO_4	Silver(I) chromate	-731.7	-641.8	217.6	142.3								
Ag_2O	Silver(I) oxide	-31.1	-11.2	121.3	65.9								
Ag_2O_2	Silver(II) oxide	-24.3	27.6	117.0	88.0								
Ag_2O_3	Silver(III) oxide	33.9	121.4	100.0									
Ag_2O_4S	Silver(I) sulfate	-715.9	-618.4	200.4	131.4								
Ag_2S	Silver(I) sulfide (argentite)	-32.6	-40.7	144.0	76.5								
Al	Aluminum	0.0		28.3	24.2					330.0	289.4	164.6	21.4

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
AlB_3H_{12}	Aluminum borohydride					-16.3	145.0	289.1	194.6	13.0	147.0	379.2	
AlBr	Aluminum monobromide									-4.0	-42.0	239.5	35.6
$AlBr_3$	Aluminum bromide	-527.2		180.2	100.6					-425.1			
AlCl	Aluminum monochloride									-47.7	-74.1	228.1	35.0
$AlCl_2$	Aluminum dichloride									-331.0			
$AlCl_3$	Aluminum chloride	-704.2	-628.8	109.3	91.1					-583.2			
AlF	Aluminum monofluoride									-258.2	-283.7	215.0	31.9
AlF_3	Aluminum fluoride	-1510.4	-1431.1	66.5	75.1					-1204.6	-1188.2	277.1	62.6
AlF_4Na	Sodium tetrafluoroaluminate									-1869.0	-1827.5	345.7	105.9
AlH	Aluminum monohydride									259.2	231.2	187.9	29.4
AlH_3	Aluminum hydride	-46.0		30.0	40.2								
AlH_4K	Potassium aluminum hydride	-183.7											
AlH_4Li	Lithium aluminum hydride	-116.3	-44.7	78.7	83.2								
AlH_4Na	Sodium aluminum hydride	-115.5											
AlI	Aluminum monoiodide									65.5			36.0
AlI_3	Aluminum iodide	-313.8	-300.8	159.0	98.7					-207.5			
AlN	Aluminum nitride	-318.0	-287.0	20.2	30.1								
AlO	Aluminum monoxide									91.2	65.3	218.4	30.9
AlO_4P	Aluminum phosphate	-1733.8	-1617.9	90.8	93.2								
AlP	Aluminum phosphide	-166.5											
AlS	Aluminum monosulfide									200.9	150.1	230.6	33.4
Al_2	Dialuminum									485.9	433.3	233.2	36.4
Al_2Br_6	Aluminum hexabromide									-970.7			
Al_2Cl_6	Aluminum hexachloride									-1290.8	-1220.4	490.0	
Al_2F_6	Aluminum hexafluoride									-2628.0			
Al_2I_6	Aluminum hexaiodide									-516.7			
Al_2O	Aluminum oxide (Al_2O)									-130.0	-159.0	259.4	45.7
Al_2O_3	Aluminum oxide (corundum)	-1675.7	-1582.3	50.9	79.0								
Al_2S_3	Aluminum sulfide	-724.0		116.9	105.1								
Am	Americium	0.0											
Ar	Argon									0.0		154.8	20.8
As	Arsenic (gray)	0.0		35.1	24.6					302.5	261.0	174.2	20.8
As	Arsenic (yellow)	14.6											
$AsBr_3$	Arsenic(III) bromide	-197.5								-130.0	-159.0	363.9	79.2
$AsCl_3$	Arsenic(III) chloride					-305.0	-259.4	216.3		-261.5	-248.9	327.2	75.7
AsF_3	Arsenic(III) fluoride					-821.3	-774.2	181.2	126.6	-785.8	-770.8	289.1	65.6
AsGa	Gallium arsenide	-71.0	-67.8	64.2	46.2								
AsH_3	Arsine									66.4	68.9	222.8	38.1
AsH_3O_4	Arsenic acid	-906.3											
AsI_3	Arsenic(III) iodide	-58.2	-59.4	213.1	105.8							388.3	80.6
AsIn	Indium arsenide	-58.6	-53.6	75.7	47.8								
AsO	Arsenic monoxide									70.0			
As_2	Diarsenic									222.2	171.9	239.4	35.0
As_2O_5	Arsenic(V) oxide	-924.9	-782.3	105.4	116.5								
As_2S_3	Arsenic(III) sulfide	-169.0	-168.6	163.6	116.3								
At	Astatine	0.0											
Au	Gold	0.0		47.4	25.4					366.1	326.3	180.5	20.8
AuBr	Gold(I) bromide	-14.0											
$AuBr_3$	Gold(III) bromide	-53.3											
AuCl	Gold(I) chloride	-34.7											
$AuCl_3$	Gold(III) chloride	-117.6											
AuF_3	Gold(III) fluoride	-363.6											
AuH	Gold hydride									295.0	265.7	211.2	29.2
AuI	Gold(I) iodide	0.0											
Au_2	Digold									515.1			36.9
B	Boron (β-rhombohedral)	0.0		5.9	11.1					565.0	521.0	153.4	20.8
BBr	Bromoborane(1)									238.1	195.4	225.0	32.9
BBr_3	Boron tribromide					-239.7	-238.5	229.7		-205.6	-232.5	324.2	67.8
BCl	Chloroborane(1)									149.5	120.9	213.2	31.7
BClO	Chloroxyborane									-314.0			
BCl_3	Boron trichloride					-427.2	-387.4	206.3	106.7	-403.8	-388.7	290.1	62.7
$BCsO_2$	Cesium metaborate	-972.0	-915.0	104.4	80.6								
BF	Fluoroborane(1)									-122.2	-149.8	200.5	29.6
BFO	Fluorooxyborane									-607.0			
BF_3	Boron trifluoride									-1136.0	-1119.4	254.4	
BF_3H_3N	Aminetrifluoroboron	-1353.9											

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
BF_3H_3P	Trihydro(phosphorus trifluoride)boron									-854.0			
BF_4Na	Sodium tetrafluoroborate	-1844.7	-1750.1	145.3	120.3								
BH	Borane(1)									442.7	412.7	171.8	29.2
BHO_2	Metaboric acid (β, monoclinic)	-794.3	-723.4	38.0						-561.9	-551.0	240.1	42.2
BH_3	Borane(3)									89.2	93.3	188.2	36.0
BH_3O_3	Boric acid	-1094.3	-968.9	90.0	86.1					-994.1			
BH_4K	Potassium borohydride	-227.4	-160.3	106.3	96.1								
BH_4Li	Lithium borohydride	-190.8	-125.0	75.9	82.6								
BH_4Na	Sodium borohydride	-188.6	-123.9	101.3	86.8								
BI_3	Boron triiodide									71.1	20.7	349.2	70.8
BKO_2	Potassium metaborate	-981.6	-923.4	80.0	66.7								
$BLiO_2$	Lithium metaborate	-1032.2	-976.1	51.5	59.8								
BN	Boron nitride	-254.4	-228.4	14.8	19.7					647.5	614.5	212.3	29.5
$BNaO_2$	Sodium metaborate	-977.0	-920.7	73.5	65.9								
BO	Boron monoxide									25.0	-4.0	203.5	29.2
BO_2	Boron dioxide									-300.4	-305.9	229.6	43.0
BO_2Rb	Rubidium metaborate	-971.0	-913.0	94.3	74.1								
BS	Boron monosulfide									342.0	288.8	216.2	30.0
B_2	Diboron									830.5	774.0	201.9	30.5
B_2Cl_4	Tetrachlorodiborane					-523.0	-464.8	262.3	137.7	-490.4	-460.6	357.4	95.4
B_2F_4	Tetrafluorodiborane									-1440.1	-1410.4	317.3	79.1
B_2H_6	Diborane									36.4	87.6	232.1	56.7
B_2O_2	Diboron dioxide									-454.8	-462.3	242.5	57.3
B_2O_3	Boron oxide	-1273.5	-1194.3	54.0	62.8					-843.8	-832.0	279.8	66.9
B_2S_3	Boron sulfide	-240.6		100.0	111.7					67.0			
$B_3H_6N_3$	Borazine					-541.0	-392.7	199.6					
B_4H_{10}	Tetraborane(10)									66.1	184.3	280.3	93.2
$B_4Na_2O_7$	Sodium tetraborate	-3291.1	-3096.0	189.5	186.8								
B_5H_9	Pentaborane(9)					42.7	171.8	184.2	151.1	73.2	173.6	280.6	99.6
B_5H_{11}	Pentaborane(11)					73.2				103.3	230.6	321.0	130.3
B_6H_{10}	Hexaborane(10)					56.3				94.6	211.3	296.8	125.7
B_9H_{15}	Nonaborane(15)									158.4	357.5	364.9	187.0
$B_{10}H_{14}$	Decaborane(14)									47.3	232.8	350.7	186.1
Ba	Barium	0.0		62.5	28.1					180.0	146.0	170.2	20.8
$BaBr_2$	Barium bromide	-757.3	-736.8	146.0									
$BaCl_2$	Barium chloride	-855.0	-806.7	123.7	75.1								
$BaCl_2H_4O_2$	Barium chloride dihydrate	-1456.9	-1293.2	203.0									
BaF_2	Barium fluoride	-1207.1	-1156.8	96.4	71.2								
BaH_2	Barium hydride	-177.0	-138.2	63.0	46.0								
BaH_2O_2	Barium hydroxide	-944.7											
BaI_2	Barium iodide	-602.1											
BaN_2O_4	Barium nitrite	-768.2											
BaN_2O_6	Barium nitrate	-988.0	-792.6	214.0	151.4								
BaO	Barium oxide	-548.0	-520.3	72.1	47.3					-112.0			
BaO_4S	Barium sulfate	-1473.2	-1362.2	132.2	101.8								
BaS	Barium sulfide	-460.0	-456.0	78.2	49.4								
Be	Beryllium	0.0		9.5	16.4					324.0	286.6	136.3	20.8
$BeBr_2$	Beryllium bromide	-353.5		108.0	69.4								
$BeCl_2$	Beryllium chloride	-490.4	-445.6	75.8	62.4								
BeF_2	Beryllium fluoride	-1026.8	-979.4	53.4	51.8								
BeH_2O_2	Beryllium hydroxide	-902.5	-815.0	45.5	62.1								
BeI_2	Beryllium iodide	-192.5		121.0	71.1								
BeO	Beryllium oxide	-609.4	-580.1	13.8	25.6								
BeO_4S	Beryllium sulfate	-1205.2	-1093.8	77.9	85.7								
BeS	Beryllium sulfide	-234.3		34.0	34.0								
Bi	Bismuth	0.0		56.7	25.5					207.1	168.2	187.0	20.8
BiClO	Bismuth oxychloride	-366.9	-322.1	120.5									
$BiCl_3$	Bismuth trichloride	-379.1	-315.0	177.0	105.0					-265.7	-256.0	358.9	79.7
BiH_3O_3	Bismuth hydroxide	-711.3											
BiI_3	Bismuth triiodide		-175.3										
Bi_2	Dibismuth									219.7			36.9
Bi_2O_3	Bismuth oxide	-573.9	-493.7	151.5	113.5								
$Bi_2O_{12}S_3$	Bismuth sulfate	-2544.3											
Bi_2S_3	Bismuth sulfide	-143.1	-140.6	200.4	122.2								
Bk	Berkelium	0.0											

Molecular formula	Name	Crystal				Liquid				Gas			
		$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
Br	Bromine (atomic)									111.9	82.4	175.0	20.8
BrCl	Bromine chloride									14.6	-1.0	240.1	35.0
$BrCl_3Si$	Bromotrichlorosilane											350.1	90.9
BrCs	Cesium bromide	-405.8	-391.4	113.1	52.9								
BrCu	Copper(I) bromide	-104.6	-100.8	96.1	54.7								
BrF	Bromine fluoride									-93.8	-109.2	229.0	33.0
BrF_3	Bromine trifluoride					-300.8	-240.5	178.2	124.6	-255.6	-229.4	292.5	66.6
BrF_5	Bromine pentafluoride					-458.6	-351.8	225.1		-428.9	-350.6	320.2	99.6
BrGe	Germanium monobromide									235.6			37.1
$BrGeH_3$	Bromogermane											274.8	56.4
BrH	Hydrogen bromide									-36.3	-53.4	198.7	29.1
BrHSi	Bromosilylene									-464.4			
BrH_3Si	Bromosilane											262.4	52.8
BrH_4N	Ammonium bromide	-270.8	-175.2	113.0	96.0								
BrI	Iodine bromide									40.8	3.7	258.8	36.4
BrIn	Indium(I) bromide	-175.3	-169.0	113.0						-56.9	-94.3	259.5	36.7
BrK	Potassium bromide	-393.8	-380.7	95.9	52.3								
$BrKO_3$	Potassium bromate	-360.2	-271.2	149.2	105.2								
$BrKO_4$	Potassium perbromate	-287.9	-174.4	170.1	120.2								
BrLi	Lithium bromide	-351.2	-342.0	74.3									
BrNO	Nitrosyl bromide									82.2	82.4	273.7	45.5
BrNa	Sodium bromide	-361.1	-349.0	86.8	51.4					-143.1	-177.1	241.2	36.3
$BrNaO_3$	Sodium bromate	-334.1	-242.6	128.9									
BrO	Bromine monoxide									125.8	109.6	233.0	34.2
BrO_2	Bromine dioxide									152.0	155.0	271.1	45.4
BrRb	Rubidium bromide	-394.6	-381.8	110.0	52.8								
BrSi	Bromosilyldyne									209.0			38.6
BrTl	Thallium(I) bromide	-173.2	-167.4	120.5						-37.7			
Br_2	Bromine					0.0		152.2	75.7	30.9	3.1	245.5	36.0
Br_2Ca	Calcium bromide	-682.8	-663.6	130.0									
Br_2Cd	Cadmium bromide	-316.2	-296.3	137.2	76.7								
Br_2Co	Cobalt(II) bromide	-220.9			79.5								
Br_2Cr	Chromium(II) bromide	-302.1											
Br_2Cu	Copper(II) bromide	-141.8											
Br_2Fe	Iron(II) bromide	-249.8	-238.1	140.6									
Br_2H_2Si	Dibromosilane											309.7	65.5
Br_2Hg	Mercury(II) bromide	-170.7	-153.1	172.0									
Br_2Hg_2	Mercury(I) bromide	-206.9	-181.1	218.0									
Br_2Mg	Magnesium bromide	-524.3	-503.8	117.2									
Br_2Mn	Manganese(II) bromide	-384.9											
Br_2Ni	Nickel(II) bromide	-212.1											
Br_2Pb	Lead(II) bromide	-278.7	-261.9	161.5	80.1								
Br_2Pt	Platinum(II) bromide	-82.0											
Br_2S_2	Sulfur bromide					-13.0							
Br_2Se	Selenium dibromide									-21.0			
Br_2Sn	Tin(II) bromide	-243.5											
Br_2Sr	Strontium bromide	-717.6	-697.1	135.1	75.3								
Br_2Ti	Titanium(II) bromide	-402.0											
Br_2Zn	Zinc bromide	-328.7	-312.1	138.5									
Br_3Ce	Cerium(III) bromide	-891.4											
Br_3ClSi	Tribromochlorosilane											377.1	95.3
Br_3Dy	Dysprosium(III) bromide	-836.2											
Br_3Fe	Iron(III) bromide	-268.2											
Br_3Ga	Gallium(III) bromide	-386.6	-359.8	180.0									
Br_3HSi	Tribromosilane					-355.6	-336.4	248.1		-317.6	-328.5	348.6	80.8
Br_3In	Indium(III) bromide	-428.9								-282.0			
Br_3OP	Phosphoric tribromide	-458.6										359.8	89.9
Br_3P	Phosphorus(III) bromide					-184.5	-175.7	240.2		-139.3	-162.8	348.1	76.0
Br_3Pt	Platinum(III) bromide	-120.9											
Br_3Re	Rhenium(III) bromide	-167.0											
Br_3Ru	Ruthenium(III) bromide	-138.0											
Br_3Sb	Antimony(III) bromide	-259.4	-239.3	207.1						-194.6	-223.9	372.9	80.2
Br_3Sc	Scandium bromide	-743.1											
Br_3Ti	Titanium(III) bromide	-548.5	-523.8	176.6	101.7								
Br_4Ge	Germanium(IV) bromide					-347.7	-331.4	280.7		-300.0	-318.0	396.2	101.8
Br_4Pa	Protactinium(IV) bromide	-824.0	-787.8	234.0									

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
Br_4Pt	Platinum(IV) bromide	-156.5											
Br_4Si	Tetrabromosilane					-457.3	-443.9	277.8		-415.5	-431.8	377.9	97.1
Br_4Sn	Tin(IV) bromide	-377.4	-350.2	264.4						-314.6	-331.4	411.9	103.4
Br_4Te	Tellurium tetrabromide	-190.4											
Br_4Ti	Titanium(IV) bromide	-616.7	-589.5	243.5	131.5					-549.4	-568.2	398.4	100.8
Br_4V	Vanadium(IV) bromide									-336.8			
Br_4Zr	Zirconium(IV) bromide	-760.7											
Br_5P	Phosphorus(V) bromide	-269.9											
Br_5Ta	Tantalum(V) bromide	-598.3											
Br_6W	Tungsten(VI) bromide	-348.5											
Ca	Calcium	0.0		41.6	25.9					177.8	144.0	154.9	20.8
$CaCl_2$	Calcium chloride	-795.4	-748.8	108.4	72.9								
CaF_2	Calcium fluoride	-1228.0	-1175.6	68.5	67.0								
CaH_2	Calcium hydride	-181.5	-142.5	41.4	41.0								
CaH_2O_2	Calcium hydroxide	-985.2	-897.5	83.4	87.5								
CaI_2	Calcium iodide	-533.5	-528.9	142.0									
CaN_2O_6	Calcium nitrate	-938.2	-742.8	193.2	149.4								
CaO	Calcium oxide	-634.9	-603.3	38.1	42.0								
CaO_4S	Calcium sulfate	-1434.5	-1322.0	106.5	99.7								
CaS	Calcium sulfide	-482.4	-477.4	56.5	47.4								
$Ca_3O_8P_2$	Calcium phosphate	-4120.8	-3884.7	236.0	227.8								
Cd	Cadmium	0.0		51.8	26.0					111.8		167.7	20.8
$CdCl_2$	Cadmium chloride	-391.5	-343.9	115.3	74.7								
CdF_2	Cadmium fluoride	-700.4	-647.7	77.4									
CdH_2O_2	Cadmium hydroxide	-560.7	-473.6	96.0									
CdI_2	Cadmium iodide	-203.3	-201.4	161.1	80.0								
CdO	Cadmium oxide	-258.4	-228.7	54.8	43.4								
CdO_4S	Cadmium sulfate	-933.3	-822.7	123.0	99.6								
CdS	Cadmium sulfide	-161.9	-156.5	64.9									
CdTe	Cadmium telluride	-92.5	-92.0	100.0									
Ce	Cerium (γ, fcc)	0.0		72.0	26.9					423.0	385.0	191.8	23.1
$CeCl_3$	Cerium(III) chloride	-1060.5	-984.8	151.0	87.4								
CeI_3	Cerium(III) iodide	-669.3											
CeO_2	Cerium(IV) oxide	-1088.7	-1024.6	62.3	61.6								
CeS	Cerium(II) sulfide	-459.4	-451.5	78.2	50.0								
Ce_2O_3	Cerium(III) oxide	-1796.2	-1706.2	150.6	114.6								
Cf	Californium	0.0											
Cl	Chlorine (atomic)									121.3	105.3	165.2	21.8
ClCs	Cesium chloride	-443.0	-414.5	101.2	52.5								
$ClCsO_4$	Cesium perchlorate	-443.1	-314.3	175.1	108.3								
ClCu	Copper(I) chloride	-137.2	-119.9	86.2	48.5								
ClF	Chlorine fluoride									-50.3	-51.8	217.9	32.1
$ClFO_3$	Perchloryl fluoride									-23.8	48.2	279.0	64.9
ClF_3	Chlorine trifluoride					-189.5				-163.2	-123.0	281.6	63.9
ClF_5S	Sulfur chloride pentafluoride					-1065.7							
ClGe	Germanium monochloride									155.2	124.2	247.0	36.9
$ClGeH_3$	Chlorogermane											263.7	54.7
ClH	Hydrogen chloride									-92.3	-95.3	186.9	29.1
ClHO	Hypochlorous acid									-78.7	-66.1	236.7	37.2
$ClHO_4$	Perchloric acid					-40.6							
ClH_3Si	Chlorosilane											250.7	51.0
ClH_4N	Ammonium chloride	-314.4	-202.9	94.6	84.1								
ClH_4NO_4	Ammonium perchlorate	-295.3	-88.8	186.2									
ClH_4P	Phosphonium chloride	-145.2											
ClI	Iodine chloride					-23.9	-13.6	135.1		17.8	-5.5	247.6	35.6
ClIn	Indium(I) chloride	-186.2								-75.0			
ClK	Potassium chloride	-436.5	-408.5	82.6	51.3					-214.6	-233.3	239.1	36.5
$ClKO_3$	Potassium chlorate	-397.7	-296.3	143.1	100.3								
$ClKO_4$	Potassium perchlorate	-432.8	-303.1	151.0	112.4								
ClLi	Lithium chloride	-408.6	-384.4	59.3	48.0								
$ClLiO_4$	Lithium perchlorate	-381.0											
ClNO	Nitrosyl chloride									51.7	66.1	261.7	44.7
$ClNO_2$	Nitryl chloride									12.6	54.4	272.2	53.2
ClNa	Sodium chloride	-411.2	-384.1	72.1	50.5								
$ClNaO_2$	Sodium chlorite	-307.0											
$ClNaO_3$	Sodium chlorate	-365.8	-262.3	123.4									

Molecular formula	Name	Crystal $\Delta_f H°$ kJ/mol	Crystal $\Delta_f G°$ kJ/mol	Crystal $S°$ J/mol K	Crystal C_p J/mol K	Liquid $\Delta_f H°$ kJ/mol	Liquid $\Delta_f G°$ kJ/mol	Liquid $S°$ J/mol K	Liquid C_p J/mol K	Gas $\Delta_f H°$ kJ/mol	Gas $\Delta_f G°$ kJ/mol	Gas $S°$ J/mol K	Gas C_p J/mol K
$ClNaO_4$	Sodium perchlorate	-383.3	-254.9	142.3									
ClO	Chlorine oxide									101.8	98.1	226.6	31.5
ClOV	Vanadyl chloride	-607.0	-556.0	75.0									
ClO_2	Chlorine dioxide									102.5	120.5	256.8	42.0
ClO_2	Chlorine superoxide (ClOO)									89.1	105.0	263.7	46.0
ClO_4Rb	Rubidium perchlorate	-437.2	-306.9	161.1									
ClRb	Rubidium chloride	-435.4	-407.8	95.9	52.4								
ClSi	Chlorosilylidyne									189.9			36.9
ClTl	Thallium(I) chloride	-204.1	-184.9	111.3	50.9					-67.8			
Cl_2	Chlorine									0.0		223.1	33.9
Cl_2Co	Cobalt(II) chloride	-312.5	-269.8	109.2	78.5								
Cl_2Cr	Chromium(II) chloride	-395.4	-356.0	115.3	71.2								
Cl_2CrO_2	Chromyl chloride					-579.5	-510.8	221.8		-538.1	-501.6	329.8	84.5
Cl_2Cu	Copper(II) chloride	-220.1	-175.7	108.1	71.9								
Cl_2Fe	Iron(II) chloride	-341.8	-302.3	118.0	76.7								
Cl_2H_2Si	Dichlorosilane											285.7	60.5
Cl_2Hg	Mercury(II) chloride	-224.3	-178.6	146.0									
Cl_2Hg_2	Mercury(I) chloride	-265.4	-210.7	191.6									
Cl_2Mg	Magnesium chloride	-641.3	-591.8	89.6	71.4								
Cl_2Mn	Manganese(II) chloride	-481.3	-440.5	118.2	72.9								
Cl_2Ni	Nickel(II) chloride	-305.3	-259.0	97.7	71.7								
Cl_2O	Chlorine monoxide									80.3	97.9	266.2	45.4
Cl_2OS	Thionyl chloride					-245.6			121.0	-212.5	-198.3	309.8	66.5
Cl_2O_2S	Sulfuryl chloride					-394.1			134.0	-364.0	-320.0	311.9	77.0
Cl_2O_2U	Uranyl chloride	-1243.9	-1146.4	150.5	107.9								
Cl_2Pb	Lead(II) chloride	-359.4	-314.1	136.0									
Cl_2Pt	Platinum(II) chloride	-123.4											
Cl_2S	Sulfur dichloride					-50.0							
Cl_2S_2	Sulfur chloride					-59.4							
Cl_2Sn	Tin(II) chloride	-325.1											
Cl_2Sr	Strontium chloride	-828.9	-781.1	114.9	75.6								
Cl_2Ti	Titanium(II) chloride	-513.8	-464.4	87.4	69.8								
Cl_2Zn	Zinc chloride	-415.1	-369.4	111.5	71.3					-266.1			
Cl_2Zr	Zirconium(II) chloride	-502.0											
Cl_3Cr	Chromium(III) chloride	-556.5	-486.1	123.0	91.8								
Cl_3Dy	Dysprosium(III) chloride	-1000.0											
Cl_3Er	Erbium chloride	-998.7			100.0								
Cl_3Eu	Europium(III) chloride	-936.0											
Cl_3Fe	Iron(III) chloride	-399.5	-334.0	142.3	96.7								
Cl_3Ga	Gallium(III) chloride	-524.7	-454.8	142.0									
Cl_3Gd	Gadolinium(III) chloride	-1008.0			88.0								
Cl_3HSi	Trichlorosilane					-539.3	-482.5	227.6		-513.0	-482.0	313.9	75.8
Cl_3Ho	Holmium chloride	-1005.4			88.0								
Cl_3In	Indium(III) chloride	-537.2								-374.0			
Cl_3Ir	Iridium(III) chloride	-245.6											
Cl_3La	Lanthanum chloride	-1072.2			108.8								
Cl_3Lu	Lutetium chloride	-945.6								-649.0			
Cl_3N	Nitrogen trichloride					230.0							
Cl_3Nd	Neodymium chloride	-1041.0			113.0								
Cl_3OP	Phosphoric trichloride					-597.1	-520.8	222.5	138.8	-558.5	-512.9	325.5	84.9
Cl_3OV	Vanadyl trichloride					-734.7	-668.5	244.3		-695.6	-659.3	344.3	89.9
Cl_3Os	Osmium(III) chloride	-190.4											
Cl_3P	Phosphorus(III) chloride					-319.7	-272.3	217.1		-287.0	-267.8	311.8	71.8
Cl_3Pr	Praseodymium chloride	-1056.9			100.0								
Cl_3Pt	Platinum(III) chloride	-182.0											
Cl_3Re	Rhenium(III) chloride	-264.0	-188.0	123.8	92.4								
Cl_3Rh	Rhodium(III) chloride	-299.2											
Cl_3Ru	Ruthenium(III) chloride	-205.0											
Cl_3Sb	Antimony(III) chloride	-382.2	-323.7	184.1	107.9								
Cl_3Sc	Scandium chloride	-925.1											
Cl_3Sm	Samarium(III) chloride	-1025.9											
Cl_3Tb	Terbium chloride	-997.0											
Cl_3Ti	Titanium(III) chloride	-720.9	-653.5	139.7	97.2								
Cl_3Tl	Thallium(III) chloride	-315.1											
Cl_3Tm	Thulium chloride	-986.6											
Cl_3U	Uranium(III) chloride	-866.5	-799.1	159.0	102.5								

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
Cl_3V	Vanadium(III) chloride	-580.7	-511.2	131.0	93.2								
Cl_3Y	Yttrium chloride	-1000.0								-750.2			75.0
Cl_3Yb	Ytterbium(III) chloride	-959.8											
Cl_4Ge	Germanium(IV) chloride					-531.8	-462.7	245.6		-495.8	-457.3	347.7	96.1
Cl_4Hf	Hafnium(IV) chloride	-990.4	-901.3	190.8	120.5					-884.5			
Cl_4Pa	Protactinium(IV) chloride	-1043.0	-953.0	192.0									
Cl_4Pb	Lead(IV) chloride					-329.3							
Cl_4Pt	Platinum(IV) chloride	-231.8											
Cl_4Si	Tetrachlorosilane					-687.0	-619.8	239.7	145.3	-657.0	-617.0	330.7	90.3
Cl_4Sn	Tin(IV) chloride					-511.3	-440.1	258.6	165.3	-471.5	-432.2	365.8	98.3
Cl_4Te	Tellurium tetrachloride	-326.4			138.5								
Cl_4Th	Thorium(IV) chloride	-1186.2	-1094.1	190.4	120.3					-964.4	-932.0	390.7	107.5
Cl_4Ti	Titanium(IV) chloride					-804.2	-737.2	252.3	145.2	-763.2	-726.3	353.2	95.4
Cl_4U	Uranium(IV) chloride	-1019.2	-930.0	197.1	122.0					-809.6	-786.6	419.0	
Cl_4V	Vanadium(IV) chloride					-569.4	-503.7	255.0		-525.5	-492.0	362.4	96.2
Cl_4Zr	Zirconium(IV) chloride	-980.5	-889.9	181.6	119.8								
Cl_5Nb	Niobium(V) chloride	-797.5	-683.2	210.5	148.1					-703.7	-646.0	400.6	120.8
Cl_5P	Phosphorus(V) chloride	-443.5								-374.9	-305.0	364.6	112.8
Cl_5Pa	Protactinium(V) chloride	-1145.0	-1034.0	238.0									
Cl_5Ta	Tantalum(V) chloride	-859.0											
Cl_6U	Uranium(VI) chloride	-1092.0	-962.0	285.8	175.7					-1013.0	-928.0	431.0	
Cl_6W	Tungsten(VI) chloride	-602.5								-513.8			
Cm	Curium	0.0											
Co	Cobalt	0.0		30.0	24.8					424.7	380.3	179.5	23.0
CoF_2	Cobalt(II) fluoride	-692.0	-647.2	82.0	68.8								
CoH_2O_2	Cobalt(II) hydroxide	-539.7	-454.3	79.0									
CoI_2	Cobalt(II) iodide	-88.7											
CoN_2O_6	Cobalt(II) nitrate	-420.5											
CoO	Cobalt(II) oxide	-237.9	-214.2	53.0	55.2								
CoO_4S	Cobalt(II) sulfate	-888.3	-782.3	118.0									
CoS	Cobalt(II) sulfide	-82.8											
Co_2S_3	Cobalt(III) sulfide	-147.3											
Co_3O_4	Cobalt(II,III) oxide	-891.0	-774.0	102.5	123.4								
Cr	Chromium	0.0		23.8	23.4					396.6	351.8	174.5	20.8
CrF_2	Chromium(II) fluoride	-778.0											
CrF_3	Chromium(III) fluoride	-1159.0	-1088.0	93.9	78.7								
CrI_2	Chromium(II) iodide	-156.9											
CrI_3	Chromium(III) iodide	-205.0											
CrO_2	Chromium(IV) oxide	-598.0											
CrO_3	Chromium(VI) oxide									-292.9		266.2	56.0
CrO_4Pb	Lead(II) chromate	-930.9											
Cr_2FeO_4	Chromium iron oxide	-1444.7	-1343.8	146.0	133.6								
Cr_2O_3	Chromium(III) oxide	-1139.7	-1058.1	81.2	118.7								
Cr_3O_4	Chromium(II,III) oxide	-1531.0											
Cs	Cesium	0.0		85.2	32.2					76.5	49.6	175.6	20.8
CsF	Cesium fluoride	-553.5	-525.5	92.8	51.1								
CsF_2H	Cesium hydrogen fluoride	-923.8	-858.9	135.2	87.3								
CsH	Cesium hydride	-54.2											
CsHO	Cesium hydroxide	-416.2	-371.8	104.2	69.9					-256.0	-256.5	254.8	49.7
$CsHO_4S$	Cesium hydrogen sulfate	-1158.1											
CsH_2N	Cesium amide	-118.4											
CsI	Cesium iodide	-346.6	-340.6	123.1	52.8								
$CsNO_3$	Cesium nitrate	-506.0	-406.5	155.2									
CsO_2	Cesium superoxide	-286.2											
Cs_2O	Cesium oxide	-345.8	-308.1	146.9	76.0								
Cs_2O_3S	Cesium sulfite	-1134.7											
Cs_2O_4S	Cesium sulfate	-1443.0	-1323.6	211.9	134.9								
Cs_2S	Cesium sulfide	-359.8											
Cu	Copper	0.0		33.2	24.4					337.4	297.7	166.4	20.8
CuF_2	Copper(II) fluoride	-542.7											
CuH_2O_2	Copper(II) hydroxide	-449.8											
CuI	Copper(I) iodide	-67.8	-69.5	96.7	54.1								
CuN_2O_6	Copper(II) nitrate	-302.9											
CuO	Copper(II) oxide	-157.3	-129.7	42.6	42.3								
CuO_4S	Copper(II) sulfate	-771.4	-662.2	109.2									
CuO_4W	Copper(II) tungstate	-1105.0											

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
CuS	Copper(II) sulfide	-53.1	-53.6	66.5	47.8								
CuSe	Copper(II) selenide	-39.5											
Cu_2	Dicopper									484.2	431.9	241.6	36.6
Cu_2O	Copper(I) oxide	-168.6	-146.0	93.1	63.6								
Cu_2S	Copper(I) sulfide	-79.5	-86.2	120.9	76.3								
Dy	Dysprosium	0.0		75.6	27.7					290.4	254.4	196.6	20.8
DyI_3	Dysprosium(III) iodide	-620.5											
Dy_2O_3	Dysprosium(III) oxide	-1863.1	-1771.5	149.8	116.3								
Er	Erbium	0.0		73.2	28.1					317.1	280.7	195.6	20.8
ErF_3	Erbium fluoride	-1711.0											
Er_2O_3	Erbium oxide	-1897.9	-1808.7	155.6	108.5								
Es	Einsteinium	0.0											
Eu	Europium	0.0		77.8	27.7					175.3	142.2	188.8	20.8
Eu_2O_3	Europium(III) oxide	-1651.4	-1556.8	146.0	122.2								
Eu_3O_4	Europium(II,III) oxide	-2272.0	-2142.0	205.0									
F	Fluorine (atomic)									79.4	62.3	158.8	22.7
FGa	Gallium monofluoride									-251.9			33.3
FGe	Germanium monofluoride									-33.4			34.7
$FGeH_3$	Fluorogermane											252.8	51.6
FH	Hydrogen fluoride					-299.8				-273.3	-275.4	173.8	
FH_3Si	Fluorosilane											238.4	47.4
FH_4N	Ammonium fluoride	-464.0	-348.7	72.0	65.3								
FI	Iodine fluoride									-95.7	-118.5	236.2	33.4
FIn	Indium(I) fluoride									-203.4			
FK	Potassium fluoride	-567.3	-537.8	66.6	49.0								
FLi	Lithium fluoride	-616.0	-587.7	35.7	41.6								
FNO	Nitrosyl fluoride									-66.5	-51.0	248.1	41.3
FNO_2	Nitryl fluoride											260.4	49.8
FNS	Thionitrosyl fluoride (NSF)											259.8	44.1
FNa	Sodium fluoride	-576.6	-546.3	51.1	46.9								
FO	Fluorine oxide									109.0	105.3	216.4	32.0
FO_2	Fluorine superoxide (FOO)									25.4	39.4	259.5	44.5
FRb	Rubidium fluoride	-557.7											
FSi	Fluorosilylidyne									7.1	-24.3	225.8	32.6
FTl	Thallium(I) fluoride	-324.7								-182.4			
F_2	Fluorine									0.0		202.8	31.3
F_2Fe	Iron(II) fluoride	-711.3	-668.6	87.0	68.1								
F_2HK	Potassium hydrogen fluoride	-927.7	-859.7	104.3	76.9								
F_2HN	Difluoramine											252.8	43.4
F_2HNa	Sodium hydrogen fluoride	-920.3	-852.2	90.9	75.0								
F_2HRb	Rubidium hydrogen fluoride	-922.6	-855.6	120.1	79.4								
F_2Mg	Magnesium fluoride	-1124.2	-1071.1	57.2	61.6								
F_2N	Difluoroamidogen									43.1	57.8	249.9	41.0
F_2N_2	*cis*-Difluorodiazine									69.5			
F_2N_2	*trans*-Difluorodiazine									82.0			
F_2Ni	Nickel(II) fluoride	-651.4	-604.1	73.6	64.1								
F_2O	Fluorine monoxide									24.5	41.8	247.5	43.3
F_2OS	Thionyl fluoride											278.7	56.8
F_2O_2	Fluorine dioxide									19.2	58.2	277.2	62.1
F_2O_2S	Sulfuryl fluoride											284.0	66.0
F_2O_2U	Uranyl fluoride	-1653.5	-1557.4	135.6	103.2								
F_2Pb	Lead(II) fluoride	-664.0	-617.1	110.5									
F_2Si	Difluorosilylene									-619.0	-628.0	252.7	43.9
F_2Sr	Strontium fluoride	-1216.3	-1164.8	82.1	70.0								
F_2Zn	Zinc fluoride	-764.4	-713.3	73.7	65.7								
F_3Ga	Gallium(III) fluoride	-1163.0	-1085.3	84.0									
F_3Gd	Gadolinium(III) fluoride									-1297.0			
F_3HSi	Trifluorosilane											271.9	60.5
F_3Ho	Holmium fluoride	-1707.0											
F_3N	Nitrogen trifluoride									-132.1	-90.6	260.8	53.4
F_3Nd	Neodymium fluoride	-1657.0											
F_3OP	Phosphoric trifluoride									-1254.3	-1205.8	285.4	68.8
F_3P	Phosphorus(III) fluoride									-958.4	-936.9	273.1	58.7
F_3Sb	Antimony(III) fluoride	-915.5											
F_3Sc	Scandium fluoride	-1629.2	-1555.6	92.0						-1247.0	-1234.0	300.5	67.8
F_3Sm	Samarium(III) fluoride	-1778.0											

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
F_3Th	Thorium(III) fluoride									-1166.1	-1160.6	339.2	73.3
F_3U	Uranium(III) fluoride	-1502.1	-1433.4	123.4	95.1					-1058.5	-1051.9	331.9	74.3
F_3Y	Yttrium fluoride	-1718.8	-1644.7	100.0						-1288.7	-1277.8	311.8	70.3
F_4Ge	Germanium(IV) fluoride									-1190.2	-1150.0	301.9	
F_4Hf	Hafnium fluoride	-1930.5	-1830.4	113.0						-1669.8			
F_4N_2	Tetrafluorohydrazine									-8.4	79.9	301.2	79.2
F_4Pb	Lead(IV) fluoride	-941.8											
F_4S	Sulfur tetrafluoride									-763.2	-722.0	299.6	77.6
F_4Si	Tetrafluorosilane									-1615.0	-1572.8	282.8	73.6
F_4Th	Thorium(IV) fluoride	-2097.8	-2003.4	142.0	110.7					-1759.0	-1724.0	341.7	93.0
F_4U	Uranium(IV) fluoride	-1914.2	-1823.3	151.7	116.0					-1598.7	-1572.7	368.0	91.2
F_4V	Vanadium(IV) fluoride	-1403.3											
F_4Xe	Xenon tetrafluoride	-261.5											
F_4Zr	Zirconium(IV) fluoride	-1911.3	-1809.9	104.6	103.7								
F_5I	Iodine pentafluoride					-864.8				-822.5	-751.7	327.7	99.2
F_5Nb	Niobium(V) fluoride	-1813.8	-1699.0	160.2	134.7					-1739.7	-1673.6	321.9	97.1
F_5P	Phosphorus(V) fluoride									-1594.4	-1520.7	300.8	84.8
F_5Ta	Tantalum(V) fluoride	-1903.6											
F_5V	Vanadium(V) fluoride					-1480.3	-1373.1	175.7		-1433.9	-1369.8	320.9	98.6
$F_6H_8N_2Si$	Ammonium hexafluorosilicate	-2681.7	-2365.3	280.2	228.1								
F_6Ir	Iridium(VI) fluoride	-579.7	-461.6	247.7						-544.0	-460.0	357.8	121.1
F_6K_2Si	Potassium hexafluorosilicate	-2956.0	-2798.6	226.0									
F_6Mo	Molybdenum(VI) fluoride					-1585.5	-1473.0	259.7	169.8	-1557.7	-1472.2	350.5	120.6
F_6Na_2Si	Sodium hexafluorosilicate	-2909.6	-2754.2	207.1	187.1								
F_6Os	Osmium(VI) fluoride			246.0								358.1	120.8
F_6Pt	Platinum(VI) fluoride			235.6								348.3	122.8
F_6S	Sulfur hexafluoride									-1220.5	-1116.5	291.5	97.0
F_6Se	Selenium hexafluoride									-1117.0	-1017.0	313.9	110.5
F_6Si_2	Hexafluorodisilane	-2427.0	-2299.7	219.1	129.5					-2383.3	-2307.3	391.0	129.9
F_6Te	Tellurium hexafluoride									-1318.0			
F_6U	Uranium(VI) fluoride	-2197.0	-2068.5	227.6	166.8					-2147.4	-2063.7	377.9	129.6
F_6W	Tungsten(VI) fluoride					-1747.7	-1631.4	251.5		-1721.7	-1632.1	341.1	119.0
Fe	Iron	0.0		27.3	25.1					416.3	370.7	180.5	25.7
FeI_2	Iron(II) iodide	-113.0											
FeI_3	Iron(III) iodide									71.0			
$FeMoO_4$	Iron(II) molybdate	-1075.0	-975.0	129.3	118.5								
FeO	Iron(II) oxide	-272.0											
FeO_4S	Iron(II) sulfate	-928.4	-820.8	107.5	100.6								
FeO_4W	Iron(II) tungstate	-1155.0	-1054.0	131.8	114.6								
FeS	Iron(II) sulfide	-100.0	-100.4	60.3	50.5								
FeS_2	Iron disulfide	-178.2	-166.9	52.9	62.2								
Fe_2O_3	Iron(III) oxide	-824.2	-742.2	87.4	103.9								
Fe_2O_4Si	Iron(II) orthosilicate	-1479.9	-1379.0	145.2	132.9								
Fe_3O_4	Iron(II,III) oxide	-1118.4	-1015.4	146.4	143.4								
Fm	Fermium	0.0											
Fr	Francium	0.0		95.4									
Ga	Gallium	0.0	0.0	40.8	26.1	5.6				272.0	233.7	169.0	25.3
GaH_3O_3	Gallium(III) hydroxide	-964.4	-831.3	100.0									
GaI_3	Gallium(III) iodide	-238.9		205.0	100.0								
GaN	Gallium nitride	-110.5											
GaO	Gallium monoxide									279.5	253.5	231.1	32.1
GaP	Gallium phosphide	-88.0											
GaSb	Gallium antimonide	-41.8	-38.9	76.1	48.5								
Ga_2	Digallium									438.5			
Ga_2O	Gallium suboxide	-356.0											
Ga_2O_3	Gallium(III) oxide	-1089.1	-998.3	85.0	92.1								
Gd	Gadolinium	0.0		68.1	37.0					397.5	359.8	194.3	27.5
Gd_2O_3	Gadolinium(III) oxide	-1819.6			106.7								
Ge	Germanium	0.0		31.1	23.3					372.0	331.2	167.9	30.7
GeH_3I	Iodogermane											283.2	57.5
GeH_4	Germane									90.8	113.4	217.1	45.0
GeI_4	Germanium(IV) iodide	-141.8	-144.3	271.1						-56.9	-106.3	428.9	104.1
GeO	Germanium(II) oxide	-261.9	-237.2	50.0						-46.2	-73.2	224.3	30.9
GeO_2	Germanium(IV) oxide	-580.0	-521.4	39.7	52.1								
GeP	Germanium phosphide	-21.0	-17.0	63.0									
GeS	Germanium(II) sulfide	-69.0	-71.5	71.0						92.0	42.0	234.0	33.7

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
GeTe	Germanium(II) telluride	20.0											
Ge_2	Digermanium									473.1	416.3	252.8	35.6
Ge_2H_6	Digermane					137.3				162.3			
Ge_3H_8	Trigermane					193.7				226.8			
H	Hydrogen (atomic)									218.0	203.3	114.7	20.8
HI	Hydrogen iodide									26.5	1.7	206.6	29.2
HIO_3	Iodic acid	-230.1											
HK	Potassium hydride	-57.7											
HKO	Potassium hydroxide	-424.6	-379.4	81.2	68.9					-232.0	-229.7	238.3	49.2
HKO_4S	Potassium hydrogen sulfate	-1160.6	-1031.3	138.1									
HLi	Lithium hydride	-90.5	-68.3	20.0	27.9								
HLiO	Lithium hydroxide	-487.5	-441.5	42.8	49.6					-229.0	-234.2	214.4	46.0
HN	Imidogen									351.5	345.6	181.2	29.2
HNO_2	Nitrous acid									-79.5	-46.0	254.1	45.6
HNO_3	Nitric acid					-174.1	-80.7	155.6	109.9	-133.9	-73.5	266.9	54.1
HN_3	Hydrazoic acid					264.0	327.3	140.6		294.1	328.1	239.0	43.7
HNa	Sodium hydride	-56.3	-33.5	40.0	36.4								
HNaO	Sodium hydroxide	-425.8	-379.7	64.4	59.5					-191.0	-193.9	229.0	48.0
$HNaO_4S$	Sodium hydrogen sulfate	-1125.5	-992.8	113.0									
HNa_2O_4P	Sodium hydrogen phosphate	-1748.1	-1608.2	150.5	135.3								
HO	Hydroxyl									39.0	34.2	183.7	29.9
HORb	Rubidium hydroxide	-418.8	-373.9	94.0	69.0					-238.0	-239.1	248.5	49.5
HOTl	Thallium(I) hydroxide	-238.9	-195.8	88.0									
HO_2	Hydroperoxy									10.5	22.6	229.0	34.9
HO_3P	Metaphosphoric acid	-948.5											
HO_4RbS	Rubidium hydrogen sulfate	-1159.0											
HO_4Re	Perrhenic acid	-762.3	-656.4	158.2									
HRb	Rubidium hydride	-52.3											
HS	Mercapto									142.7	113.3	195.7	32.3
HSi	Silylidyne									361.0			
HTa_2	Tantalum hydride	-32.6	-69.0	79.1	90.8								
H_2	Hydrogen									0.0		130.7	28.8
H_2KN	Potassium amide	-128.9											
H_2KO_4P	Potassium dihydrogen phosphate	-1568.3	-1415.9	134.9	116.6								
H_2LiN	Lithium amide	-179.5											
H_2Mg	Magnesium hydride	-75.3	-35.9	31.1	35.4								
H_2MgO_2	Magnesium hydroxide	-924.5	-833.5	63.2	77.0								
H_2N	Amidogen									184.9	194.6	195.0	33.9
H_2NNa	Sodium amide	-123.8	-64.0	76.9	66.2								
H_2NRb	Rubidium amide	-113.0											
$H_2N_2O_2$	Nitramide	-89.5											
H_2NiO_2	Nickel(II) hydroxide	-529.7	-447.2	88.0									
H_2O	Water					-285.8	-237.1	70.0	75.3	-241.8	-228.6	188.8	33.6
H_2O_2	Hydrogen peroxide					-187.8	-120.4	109.6	89.1	-136.3	-105.6	232.7	43.1
H_2O_2Sn	Tin(II) hydroxide	-561.1	-491.6	155.0									
H_2O_2Sr	Strontium hydroxide	-959.0											
H_2O_2Zn	Zinc hydroxide	-641.9	-553.5	81.2									
H_2O_3Si	Metasilicic acid	-1188.7	-1092.4	134.0									
H_2O_4S	Sulfuric acid					-814.0	-690.0	156.9	138.9				
H_2O_4Se	Selenic acid	-530.1											
H_2S	Hydrogen sulfide									-20.6	-33.4	205.8	34.2
H_2S_2	Hydrogen disulfide					-18.1			84.1	15.5			51.5
H_2Se	Hydrogen selenide									29.7	15.9	219.0	34.7
H_2Sr	Strontium hydride	-180.3											
H_2Te	Hydrogen telluride									99.6			
H_2Th	Thorium hydride	-139.7	-100.0	50.7	36.7								
H_2Zr	Zirconium(II) hydride	-169.0	-128.8	35.0	31.0								
H_3ISi	Iodosilane											270.9	54.4
H_3N	Ammonia									-45.9	-16.4	192.8	35.1
H_3NO	Hydroxylamine	-114.2											
H_3O_2P	Phosphinic acid	-604.6				-595.4							
H_3O_3P	Phosphonic acid	-964.4											
H_3O_4P	Phosphoric acid	-1284.4	-1124.3	110.5	106.1	-1271.7	-1123.6	150.8	145.0				
H_3P	Phosphine									5.4	13.5	210.2	37.1
H_3Sb	Stibine									145.1	147.8	232.8	41.1
H_3U	Uranium(III) hydride	-127.2	-72.8	63.7	49.3								

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
H_4IN	Ammonium iodide	-201.4	-112.5	117.0									
H_4N_2	Hydrazine					50.6	149.3	121.2	98.9	95.4	159.4	238.5	48.4
$H_4N_2O_2$	Ammonium nitrite	-256.5											
$H_4N_2O_3$	Ammonium nitrate	-365.6	-183.9	151.1	139.3								
H_4N_4	Ammonium azide	115.5	274.2	112.5									
H_4O_4Si	Orthosilicic acid	-1481.1	-1332.9	192.0									
$H_4O_7P_2$	Diphosphoric acid	-2241.0				-2231.7							
H_4P_2	Diphosphine					-5.0				20.9			
H_4Si	Silane									34.3	56.9	204.6	42.8
H_4Sn	Stannane									162.8	188.3	227.7	49.0
H_5NO	Ammonium hydroxide					-361.2	-254.0	165.6	154.9				
H_5NO_3S	Ammonium hydrogen sulfite	-768.6											
H_5NO_4S	Ammonium hydrogen sulfate	-1027.0											
H_6Si_2	Disilane									80.3	127.3	272.7	80.8
$H_8N_2O_4S$	Ammonium sulfate	-1180.9	-901.7	220.1	187.5								
H_8Si_3	Trisilane					92.5				120.9			
$H_9N_2O_4P$	Ammonium hydrogen phosphate	-1566.9			188.0								
$H_{12}N_3O_4P$	Ammonium phosphate	-1671.9											
He	Helium									0.0		126.2	20.8
Hf	Hafnium	0.0		43.6	25.7					619.2	576.5	186.9	20.8
HfO_2	Hafnium oxide	-1144.7	-1088.2	59.3	60.3								
Hg	Mercury					0.0		75.9	28.0	61.4	31.8	175.0	20.8
HgI_2	Mercury(II) iodide	-105.4	-101.7	180.0									
HgO	Mercury(II) oxide	-90.8	-58.5	70.3	44.1								
HgO_4S	Mercury(II) sulfate	-707.5											
HgS	Mercury(II) sulfide (red)	-58.2	-50.6	82.4	48.4								
HgTe	Mercury(II) telluride	-42.0											
Hg_2	Dimercury									108.8	68.2	288.1	37.4
Hg_2I_2	Mercury(I) iodide	-121.3	-111.0	233.5									
Hg_2O_4S	Mercury(I) sulfate	-743.1	-625.8	200.7	132.0								
Ho	Holmium	0.0		75.3	27.2					300.8	264.8	195.6	20.8
Ho_2O_3	Holmium oxide	-1880.7	-1791.1	158.2	115.0								
I	Iodine (atomic)									106.8	70.2	180.8	20.8
IIn	Indium(I) iodide	-116.3	-120.5	130.0						7.5	-37.7	267.3	36.8
IK	Potassium iodide	-327.9	-324.9	106.3	52.9								
IKO_3	Potassium iodate	-501.4	-418.4	151.5	106.5								
IKO_4	Potassium periodate	-467.2	-361.4	175.7									
ILi	Lithium iodide	-270.4	-270.3	86.8	51.0								
INa	Sodium iodide	-287.8	-286.1	98.5	52.1								
$INaO_3$	Sodium iodate	-481.8			92.0								
$INaO_4$	Sodium periodate	-429.3	-323.0	163.0									
IO	Iodine monoxide									126.0	102.5	239.6	32.9
IRb	Rubidium iodide	-333.8	-328.9	118.4	53.2								
ITl	Thallium(I) iodide	-123.8	-125.4	127.6						7.1			
I_2	Iodine (rhombic)	0.0		116.1	54.4					62.4	19.3	260.7	36.9
I_2Mg	Magnesium iodide	-364.0	-358.2	129.7									
I_2Ni	Nickel(II) iodide	-78.2											
I_2Pb	Lead(II) iodide	-175.5	-173.6	174.9	77.4								
I_2Sn	Tin(II) iodide	-143.5											
I_2Sr	Strontium iodide	-558.1			81.6								
I_2Zn	Zinc iodide	-208.0	-209.0	161.1									
I_3In	Indium(III) iodide	-238.0								-120.5			
I_3La	Lanthanum iodide	-668.9											
I_3Lu	Lutetium iodide	-548.0											
I_3P	Phosphorus(III) iodide	-45.6										374.4	78.4
I_3Ru	Ruthenium(III) iodide	-65.7											
I_3Sb	Antimony(III) iodide	-100.4											
I_4Pt	Platinum(IV) iodide	-72.8											
I_4Si	Tetraiodosilane	-189.5											
I_4Sn	Tin(IV) iodide				84.9							446.1	105.4
I_4Ti	Titanium(IV) iodide	-375.7	-371.5	249.4	125.7					-277.8			
I_4V	Vanadium(IV) iodide									-122.6			
I_4Zr	Zirconium(IV) iodide	-481.6											
In	Indium	0.0		57.8	26.7					243.3	208.7	173.8	20.8
InO	Indium monoxide									387.0	364.4	236.5	32.6
InP	Indium phosphide	-88.7	-77.0	59.8	45.4								

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
InS	Indium(II) sulfide	-138.1	-131.8	67.0						238.0			
InSb	Indium antimonide	-30.5	-25.5	86.2	49.5					344.3			
In_2	Diindium									380.9			
In_2O_3	Indium(III) oxide	-925.8	-830.7	104.2	92.0								
In_2S_3	Indium(III) sulfide	-427.0	-412.5	163.6	118.0								
In_2Te_5	Indium(IV) telluride	-175.3											
Ir	Iridium	0.0		35.5	25.1					665.3	617.9	193.6	20.8
IrO_2	Iridium(IV) oxide	-274.1			57.3								
IrS_2	Iridium(IV) sulfide	-138.0											
Ir_2S_3	Iridium(III) sulfide	-234.0											
K	Potassium	0.0		64.7	29.6					89.0	60.5	160.3	20.8
$KMnO_4$	Potassium permanganate	-837.2	-737.6	171.7	117.6								
KNO_2	Potassium nitrite	-369.8	-306.6	152.1	107.4								
KNO_3	Potassium nitrate	-494.6	-394.9	133.1	96.4								
KNa	Potassium sodium					6.3							
KO_2	Potassium superoxide	-284.9	-239.4	116.7	77.5								
K_2	Dipotassium									123.7	87.5	249.7	37.9
K_2O	Potassium oxide	-361.5											
K_2O_2	Potassium peroxide	-494.1	-425.1	102.1									
K_2O_4S	Potassium sulfate	-1437.8	-1321.4	175.6	131.5								
K_2S	Potassium sulfide	-380.7	-364.0	105.0									
K_3O_4P	Potassium phosphate	-1950.2											
Kr	Krypton									0.0		164.1	20.8
La	Lanthanum	0.0		56.9	27.1					431.0	393.6	182.4	22.8
LaS	Lanthanum monosulfide	-456.0	-451.5	73.2	59.0								
La_2O_3	Lanthanum oxide	-1793.7	-1705.8	127.3	108.8								
Li	Lithium	0.0		29.1	24.8					159.3	126.6	138.8	20.8
$LiNO_2$	Lithium nitrite	-372.4	-302.0	96.0									
$LiNO_3$	Lithium nitrate	-483.1	-381.1	90.0									
Li_2	Dilithium									215.9	174.4	197.0	36.1
Li_2O	Lithium oxide	-597.9	-561.2	37.6	54.1								
Li_2O_2	Lithium peroxide	-634.3											
Li_2O_3Si	Lithium metasilicate	-1648.1	-1557.2	79.8	99.1								
Li_2O_4S	Lithium sulfate	-1436.5	-1321.7	115.1	117.6								
Li_2S	Lithium sulfide	-441.4											
Li_3O_4P	Lithium phosphate	-2095.8											
Lr	Lawrencium	0.0											
Lu	Lutetium	0.0		51.0	26.9					427.6	387.8	184.8	20.9
Lu_2O_3	Lutetium oxide	-1878.2	-1789.0	110.0	101.8								
Md	Mendelevium	0.0											
Mg	Magnesium	0.0		32.7	24.9					147.1	112.5	148.6	20.8
MgN_2O_6	Magnesium nitrate	-790.7	-589.4	164.0	141.9								
MgO	Magnesium oxide	-601.6	-569.3	27.0	37.2								
MgO_4S	Magnesium sulfate	-1284.9	-1170.6	91.6	96.5								
MgO_4Se	Magnesium selenate	-968.5											
MgS	Magnesium sulfide	-346.0	-341.8	50.3	45.6								
Mg_2	Dimagnesium									287.7			
Mg_2O_4Si	Magnesium orthosilicate	-2174.0	-2055.1	95.1	118.5								
Mn	Manganese	0.0		32.0	26.3					280.7	238.5	173.7	20.8
MnN_2O_6	Manganese(II) nitrate	-576.3											
$MnNaO_4$	Sodium permanganate	-1156.0											
MnO	Manganese(II) oxide	-385.2	-362.9	59.7	45.4								
MnO_2	Manganese(IV) oxide	-520.0	-465.1	53.1	54.1								
MnO_3Si	Manganese(II) metasilicate	-1320.9	-1240.5	89.1	86.4								
MnS	Manganese(II) sulfide (α form)	-214.2	-218.4	78.2	50.0								
MnSe	Manganese(II) selenide	-106.7	-111.7	90.8	51.0								
Mn_2O_3	Manganese(III) oxide	-959.0	-881.1	110.5	107.7								
Mn_2O_4Si	Manganese(II) orthosilicate	-1730.5	-1632.1	163.2	129.9								
Mn_3O_4	Manganese(II,III) oxide	-1387.8	-1283.2	155.6	139.7								
Mo	Molybdenum	0.0		28.7	24.1					658.1	612.5	182.0	20.8
$MoNa_2O_4$	Sodium molybdate	-1468.1	-1354.3	159.7	141.7								
MoO_2	Molybdenum(IV) oxide	-588.9	-533.0	46.3	56.0								
MoO_3	Molybdenum(VI) oxide	-745.1	-668.0	77.7	75.0								
MoO_4Pb	Lead(II) molybdate	-1051.9	-951.4	166.1	119.7								
MoS_2	Molybdenum(IV) sulfide	-235.1	-225.9	62.6	63.6								
Mo_3Si	Molybdenum silicide	-125.2	-125.7	106.3	93.1								

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
N	Nitrogen (atomic)									472.7	455.5	153.3	20.8
$NNaO_2$	Sodium nitrite	-358.7	-284.6	103.8									
$NNaO_3$	Sodium nitrate	-467.9	-367.0	116.5	92.9								
NO	Nitric oxide									91.3	87.6	210.8	29.9
NO_2	Nitrogen dioxide									33.2	51.3	240.1	37.2
NO_2Rb	Rubidium nitrite	-367.4	-306.2	172.0									
NO_3Rb	Rubidium nitrate	-495.1	-395.8	147.3	102.1								
NO_3Tl	Thallium(I) nitrate	-243.9	-152.4	160.7	99.5								
NP	Phosphorus nitride	-63.0								171.5	149.4	211.1	29.7
N_2	Nitrogen									0.0		191.6	29.1
N_2O	Nitrous oxide									81.6	103.7	220.0	38.6
N_2O_3	Nitrogen trioxide					50.3				86.6	142.4	314.7	72.7
N_2O_4	Nitrogen tetroxide					-19.5	97.5	209.2	142.7	11.1	99.8	304.4	79.2
N_2O_4Sr	Strontium nitrite	-762.3											
N_2O_5	Nitrogen pentoxide	-43.1	113.9	178.2	143.1					13.3	117.1	355.7	95.3
N_2O_6Pb	Lead(II) nitrate	-451.9											
N_2O_6Ra	Radium nitrate	-992.0	-796.1	222.0									
N_2O_6Sr	Strontium nitrate	-978.2	-780.0	194.6	149.9								
N_2O_6Zn	Zinc nitrate	-483.7											
N_3Na	Sodium azide	21.7	93.8	96.9	76.6								
N_4Si_3	Silicon nitride	-743.5	-642.6	101.3									
Na	Sodium	0.0		51.3	28.2					107.5	77.0	153.7	20.8
NaO_2	Sodium superoxide	-260.2	-218.4	115.9	72.1								
Na_2	Disodium									142.1	103.9	230.2	37.6
Na_2O	Sodium oxide	-414.2	-375.5	75.1	69.1								
Na_2O_2	Sodium peroxide	-510.9	-447.7	95.0	89.2								
Na_2O_3S	Sodium sulfite	-1100.8	-1012.5	145.9	120.3								
Na_2O_3Si	Sodium metasilicate	-1554.9	-1462.8	113.9									
Na_2O_4S	Sodium sulfate	-1387.1	-1270.2	149.6	128.2								
Na_2S	Sodium sulfide	-364.8	-349.8	83.7									
Nb	Niobium	0.0		36.4	24.6					725.9	681.1	186.3	30.2
NbO	Niobium(II) oxide	-405.8	-378.6	48.1	41.3								
NbO_2	Niobium(IV) oxide	-796.2	-740.5	54.5	57.5								
Nb_2O_5	Niobium(V) oxide	-1899.5	-1766.0	137.2	132.1								
Nd	Neodymium	0.0		71.5	27.5					327.6	292.4	189.4	22.1
Nd_2O_3	Neodymium oxide	-1807.9	-1720.8	158.6	111.3								
Ne	Neon									0.0		146.3	20.8
Ni	Nickel	0.0		29.9	26.1					429.7	384.5	182.2	23.4
NiO_4S	Nickel(II) sulfate	-872.9	-759.7	92.0	138.0								
NiS	Nickel(II) sulfide	-82.0	-79.5	53.0	47.1								
Ni_2O_3	Nickel(III) oxide	-489.5											
No	Nobelium	0.0											
O	Oxygen (atomic)									249.2	231.7	161.1	21.9
OP	Phosphorus monoxide									-28.5	-51.9	222.8	31.8
OPb	Lead(II) oxide (massicot)	-217.3	-187.9	68.7	45.8								
OPb	Lead(II) oxide (litharge)	-219.0	-188.9	66.5	45.8								
OPd	Palladium(II) oxide	-85.4			31.4					348.9	325.9	218.0	
ORa	Radium oxide	-523.0											
ORb_2	Rubidium oxide	-339.0											
ORh	Rhodium monoxide									385.0			
OS	Sulfur monoxide									6.3	-19.9	222.0	30.2
OSe	Selenium monoxide									53.4	26.8	234.0	31.3
OSi	Silicon monoxide									-99.6	-126.4	211.6	29.9
OSn	Tin(II) oxide	-280.7	-251.9	57.2	44.3					15.1	-8.4	232.1	31.6
OSr	Strontium oxide	-592.0	-561.9	54.4	45.0					1.5			
OTi	Titanium(II) oxide	-519.7	-495.0	50.0	40.0								
OTl_2	Thallium(I) oxide	-178.7	-147.3	126.0									
OU	Uranium(II) oxide									21.0			
OV	Vanadium(II) oxide	-431.8	-404.2	38.9	45.4								
OZn	Zinc oxide	-350.5	-320.5	43.7	40.3								
O_2	Oxygen									0.0		205.2	29.4
O_2P	Phosphorus dioxide									-279.9	-281.6	252.1	39.5
O_2Pb	Lead(IV) oxide	-277.4	-217.3	68.6	64.6								
O_2Rb	Rubidium superoxide	-278.7											
O_2Rb_2	Rubidium peroxide	-472.0											
O_2Ru	Ruthenium(IV) oxide	-305.0											

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
O_2S	Sulfur dioxide					-320.5				-296.8	-300.1	248.2	39.9
O_2Se	Selenium dioxide	-225.4											
O_2Si	Silicon dioxide (α-quartz)	-910.7	-856.3	41.5	44.4					-322.0			
O_2Sn	Tin(IV) oxide	-577.6	-515.8	49.0	52.6								
O_2Te	Tellurium dioxide	-322.6	-270.3	79.5									
O_2Th	Thorium(IV) oxide	-1226.4	-1169.2	65.2	61.8								
O_2Ti	Titanium(IV) oxide	-944.0	-888.8	50.6	55.0								
O_2U	Uranium(IV) oxide	-1085.0	-1031.8	77.0	63.6					-465.7	-471.5	274.6	51.4
O_2W	Tungsten(IV) oxide	-589.7	-533.9	50.5	56.1								
O_2Zr	Zirconium(IV) oxide	-1100.6	-1042.8	50.4	56.2								
O_3	Ozone									142.7	163.2	238.9	39.2
O_3PbS	Lead(II) sulfite	-669.9											
O_3PbSi	Lead(II) metasilicate	-1145.7	-1062.1	109.6	90.0								
O_3Pr_2	Praseodymium oxide	-1809.6			117.4								
O_3Rh_2	Rhodium(III) oxide	-343.0			103.8								
O_3S	Sulfur trioxide	-454.5	-374.2	70.7		-441.0	-373.8	113.8		-395.7	-371.1	256.8	50.7
O_3Sc_2	Scandium oxide	-1908.8	-1819.4	77.0	94.2								
O_3SiSr	Strontium metasilicate	-1633.9	-1549.7	96.7	88.5								
O_3Sm_2	Samarium(III) oxide	-1823.0	-1734.6	151.0	114.5								
O_3Tb_2	Terbium oxide	-1865.2			115.9								
O_3Ti_2	Titanium(III) oxide	-1520.9	-1434.2	78.8	97.4								
O_3Tm_2	Thulium oxide	-1888.7	-1794.5	139.7	116.7								
O_3U	Uranium(VI) oxide	-1223.8	-1145.7	96.1	81.7								
O_3V_2	Vanadium(III) oxide	-1218.8	-1139.3	98.3	103.2								
O_3W	Tungsten(VI) oxide	-842.9	-764.0	75.9	73.8								
O_3Y_2	Yttrium oxide	-1905.3	-1816.6	99.1	102.5								
O_3Yb_2	Ytterbium(III) oxide	-1814.6	-1726.7	133.1	115.4								
O_4Os	Osmium(VIII) oxide	-394.1	-304.9	143.9						-337.2	-292.8	293.8	74.1
O_4PbS	Lead(II) sulfate	-920.0	-813.0	148.5	103.2								
O_4PbSe	Lead(II) selenate	-609.2	-504.9	167.8									
O_4Pb_2Si	Lead(II) orthosilicate	-1363.1	-1252.6	186.6	137.2								
O_4Pb_3	Lead(II,II,IV) oxide	-718.4	-601.2	211.3	146.9								
O_4RaS	Radium sulfate	-1471.1	-1365.6	138.0									
O_4Rb_2S	Rubidium sulfate	-1435.6	-1316.9	197.4	134.1								
O_4Ru	Ruthenium(VIII) oxide	-239.3	-152.2	146.4									
O_4SSr	Strontium sulfate	-1453.1	-1340.9	117.0									
O_4STl_2	Thallium(I) sulfate	-931.8	-830.4	230.5									
O_4SZn	Zinc sulfate	-982.8	-871.5	110.5	99.2								
O_4SiSr_2	Strontium orthosilicate	-2304.5	-2191.1	153.1	134.3								
O_4SiZn_2	Zinc orthosilicate	-1636.7	-1523.2	131.4	123.3								
O_4SiZr	Zirconium(IV) orthosilicate	-2033.4	-1919.1	84.1	98.7								
O_4TiZr	Zirconium titanate	-2024.1	-1915.8	116.7	114.0								
O_5Sb_2	Antimony(V) oxide	-971.9	-829.2	125.1									
O_5Ta_2	Tantalum(V) oxide	-2046.0	-1911.2	143.1	135.1								
O_5Ti_3	Titanium(III,IV) oxide	-2459.4	-2317.4	129.3	154.8								
O_5V_2	Vanadium(V) oxide	-1550.6	-1419.5	131.0	127.7								
O_5V_3	Vanadium(III,IV) oxide	-1933.0	-1803.0	163.0									
O_7Re_2	Rhenium(VII) oxide	-1240.1	-1066.0	207.1	166.1					-1100.0	-994.0	452.0	
O_7U_3	Uranium(IV,VI) oxide	-3427.1	-3242.9	250.5	215.5								
O_8S_2Zr	Zirconium(IV) sulfate	-2217.1			172.0								
O_8U_3	Uranium(V,VI) oxide	-3574.8	-3369.5	282.6	238.4								
O_8U_4	Uranium(IV,V) oxide	-4510.4	-4275.1	334.1	293.3								
Os	Osmium	0.0		32.6	24.7					791.0	745.0	192.6	20.8
P	Phosphorus (white)	0.0		41.1	23.8					316.5	280.1	163.2	20.8
P	Phosphorus (red)	-17.6		22.8	21.2								
P	Phosphorus (black)	-39.3											
P_2	Diphosphorus									144.0	103.5	218.1	32.1
P_4	Tetraphosphorus									58.9	24.4	280.0	67.2
Pa	Protactinium	0.0		51.9						607.0	563.0	198.1	22.9
Pb	Lead	0.0		64.8	26.4					195.2	162.2	175.4	20.8
PbS	Lead(II) sulfide	-100.4	-98.7	91.2	49.5								
PbSe	Lead(II) selenide	-102.9	-101.7	102.5	50.2								
PbTe	Lead(II) telluride	-70.7	-69.5	110.0	50.5								
Pd	Palladium	0.0		37.6	26.0					378.2	339.7	167.1	20.8
PdS	Palladium(II) sulfide	-75.0	-67.0	46.0									
Pm	Promethium	0.0										187.1	24.3

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
Po	Polonium	0.0											
Pr	Praseodymium	0.0		73.2	27.2					355.6	320.9	189.8	21.4
Pt	Platinum	0.0		41.6	25.9					565.3	520.5	192.4	25.5
PtS	Platinum(II) sulfide	-81.6	-76.1	55.1	43.4								
PtS_2	Platinum(IV) sulfide	-108.8	-99.6	74.7	65.9								
Pu	Plutonium	0.0											
Ra	Radium	0.0		71.0						159.0	130.0	176.5	20.8
Rb	Rubidium	0.0		76.8	31.1					80.9	53.1	170.1	20.8
Re	Rhenium	0.0		36.9	25.5					769.9	724.6	188.9	20.8
Rh	Rhodium	0.0		31.5	25.0					556.9	510.8	185.8	21.0
Rn	Radon									0.0		176.2	20.8
Ru	Ruthenium	0.0		28.5	24.1					642.7	595.8	186.5	21.5
S	Sulfur (rhombic)	0.0		32.1	22.6					277.2	236.7	167.8	23.7
S	Sulfur (monoclinic)	0.3											
SSi	Silicon monosulfide									112.5	60.9	223.7	32.3
SSn	Tin(II) sulfide	-100.0	-98.3	77.0	49.3								
SSr	Strontium sulfide	-472.4	-467.8	68.2	48.7								
STl_2	Thallium(I) sulfide	-97.1	-93.7	151.0									
SZn	Zinc sulfide (wurtzite)	-192.6											
SZn	Zinc sulfide (sphalerite)	-206.0	-201.3	57.7	46.0								
S_2	Disulfur									128.6	79.7	228.2	32.5
Sb	Antimony	0.0		45.7	25.2					262.3	222.1	180.3	20.8
Sb_2	Diantimony									235.6	187.0	254.9	36.4
Sc	Scandium	0.0		34.6	25.5					377.8	336.0	174.8	22.1
Se	Selenium (gray)	0.0		42.4	25.4					227.1	187.0	176.7	20.8
Se	Selenium (α form)	6.7								227.1			
Se	Selenium (vitreous)	5.0								227.1			
SeSr	Strontium selenide	-385.8											
$SeTl_2$	Thallium(I) selenide	-59.0	-59.0	172.0									
SeZn	Zinc selenide	-163.0	-163.0	84.0									
Se_2	Diselenium									146.0	96.2	252.0	35.4
Si	Silicon	0.0		18.8	20.0					450.0	405.5	168.0	22.3
Si_2	Disilicon									594.0	536.0	229.9	34.4
Sm	Samarium	0.0		69.6	29.5					206.7	172.8	183.0	30.4
Sn	Tin (white)	0.0		51.2	27.0					301.2	266.2	168.5	21.3
Sn	Tin (gray)	-2.1	0.1	44.1	25.8								
Sr	Strontium	0.0		55.0	26.8					164.4	130.9	164.6	20.8
Ta	Tantalum	0.0		41.5	25.4					782.0	739.3	185.2	20.9
Tb	Terbium	0.0		73.2	28.9					388.7	349.7	203.6	24.6
Tc	Technetium	0.0								678.0		181.1	20.8
Te	Tellurium	0.0		49.7	25.7					196.7	157.1	182.7	20.8
Te_2	Ditellurium									168.2	118.0	268.1	36.7
Th	Thorium	0.0		51.8	27.3					602.0	560.7	190.2	20.8
Ti	Titanium	0.0		30.7	25.0					473.0	428.4	180.3	24.4
Tl	Thallium	0.0		64.2	26.3					182.2	147.4	181.0	20.8
Tm	Thulium	0.0		74.0	27.0					232.2	197.5	190.1	20.8
U	Uranium	0.0		50.2	27.7					533.0	488.4	199.8	23.7
V	Vanadium	0.0		28.9	24.9					514.2	754.4	182.3	26.0
W	Tungsten	0.0		32.6	24.3					849.4	807.1	174.0	21.3
Xe	Xenon									0.0		169.7	20.8
Y	Yttrium	0.0		44.4	26.5					421.3	381.1	179.5	25.9
Yb	Ytterbium	0.0		59.9	26.7					152.3	118.4	173.1	20.8
Zn	Zinc	0.0		41.6	25.4					130.4	94.8	161.0	20.8
Zr	Zirconium	0.0		39.0	25.4					608.8	566.5	181.4	26.7
Substances containing carbon:													
C	Carbon (graphite)	0.0		5.7	8.5					716.7	671.3	158.1	20.8
C	Carbon (diamond)	1.9	2.9	2.4	6.1								
CAgN	Silver(I) cyanide	146.0	156.9	107.2	66.7								
CAg_2O_3	Silver(I) carbonate	-505.8	-436.8	167.4	112.3								
$CBaO_3$	Barium carbonate	-1213.0	-1134.4	112.1	86.0								
$CBeO_3$	Beryllium carbonate	-1025.0		52.0	65.0								
$CBrClF_2$	Bromochlorodifluoromethane											318.5	74.6
$CBrCl_2F$	Bromodichlorofluoromethane											330.6	80.0
$CBrCl_3$	Bromotrichloromethane									-41.1			85.3
$CBrF_3$	Bromotrifluoromethane									-648.3			69.3

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
CBrN	Cyanogen bromide	140.5								186.2	165.3	248.3	46.9
$CBrN_3O_6$	Bromotrinitromethane					32.5				80.3			
CBr_2ClF	Dibromochlorofluoromethane											342.8	82.4
CBr_2Cl_2	Dibromodichloromethane											347.8	87.1
CBr_2F_2	Dibromodifluoromethane											325.3	77.0
CBr_2O	Carbonyl bromide					-127.2				-96.2	-110.9	309.1	61.8
CBr_3Cl	Tribromochloromethane											357.8	89.4
CBr_3F	Tribromofluoromethane											345.9	84.4
CBr_4	Tetrabromomethane	29.4	47.7	212.5	144.3					83.9	67.0	358.1	91.2
$CCaO_3$	Calcium carbonate (calcite)	-1207.6	-1129.1	91.7	83.5								
$CCaO_3$	Calcium carbonate (aragonite)	-1207.8	-1128.2	88.0	82.3								
$CCdO_3$	Cadmium carbonate	-750.6	-669.4	92.5									
CClFO	Carbonyl chloride fluoride											276.7	52.4
$CClF_3$	Chlorotrifluoromethane									-706.3			66.9
CClN	Cyanogen chloride					112.1				138.0	131.0	236.2	45.0
$CClN_3O_6$	Chlorotrinitromethane					-27.1				18.4			
CCl_2F_2	Dichlorodifluoromethane									-477.4	-439.4	300.8	72.3
CCl_2O	Carbonyl chloride									-219.1	-204.9	283.5	57.7
CCl_3	Trichloromethyl									59.0			
CCl_3F	Trichlorofluoromethane					-301.3	-236.8	225.4	121.6	-268.3			78.1
CCl_4	Tetrachloromethane					-128.2			130.7	-95.7			83.3
$CCoO_3$	Cobalt(II) carbonate	-713.0											
CCs_2O_3	Cesium carbonate	-1139.7	-1054.3	204.5	123.9								
CCuN	Copper(I) cyanide	96.2	111.3	84.5									
CFN	Cyanogen fluoride											224.7	41.8
CF_2O	Carbonyl fluoride									-639.8			46.8
CF_3	Trifluoromethyl									-477.0	-464.0	264.5	49.6
CF_3I	Trifluoroiodomethane									-587.8		307.4	70.9
CF_4	Tetrafluoromethane									-933.6		261.6	61.1
$CFeO_3$	Iron(II) carbonate	-740.6	-666.7	92.9	82.1								
CFe_3	Iron carbide	25.1	20.1	104.6	105.9								
CH	Methylidyne									595.8			
CHBrClF	Bromochlorofluoromethane											304.3	63.2
$CHBrCl_2$	Bromodichloromethane											316.4	67.4
$CHBrF_2$	Bromodifluoromethane									-424.9		295.1	58.7
$CHBr_2Cl$	Chlorodibromomethane											327.7	69.2
$CHBr_2F$	Dibromofluoromethane											316.8	65.1
$CHBr_3$	Tribromomethane					-22.3	-5.0	220.9	130.7	23.8	8.0	330.9	71.2
$CHClF_2$	Chlorodifluoromethane									-482.6		280.9	55.9
$CHCl_2F$	Dichlorofluoromethane											293.1	60.9
$CHCl_3$	Trichloromethane					-134.1	-73.7	201.7	114.2	-102.7	6.0	295.7	65.7
$CHCsO_3$	Cesium hydrogen carbonate	-966.1											
CHFO	Formyl fluoride											246.6	39.9
CHF_3	Trifluoromethane									-695.4		259.7	51.0
CHI_3	Triiodomethane	-181.1								251.0		356.2	75.0
$CHKO_2$	Potassium formate	-679.7											
$CHKO_3$	Potassium hydrogen carbonate	-963.2	-863.5	115.5									
CHN	Hydrogen cyanide					108.9	125.0	112.8	70.6	135.1	124.7	201.8	35.9
CHNO	Isocyanic acid (HNCO)											238.0	44.9
CHNS	Isothiocyanic acid									127.6	113.0	247.8	46.9
CHN_3O_6	Trinitromethane					-32.8				-13.4		435.6	134.1
$CHNaO_2$	Sodium formate	-666.5	-599.9	103.8	82.7								
$CHNaO_3$	Sodium hydrogen carbonate	-950.8	-851.0	101.7	87.6								
CHO	Oxomethyl (HCO)									43.1	28.0	224.7	34.6
CH_2	Methylene									390.4	372.9	194.9	33.8
CH_2BrCl	Bromochloromethane											287.6	52.7
CH_2BrF	Bromofluoromethane											276.3	49.2
CH_2Br_2	Dibromomethane											293.2	54.7
CH_2ClF	Chlorofluoromethane											264.4	47.0
CH_2Cl_2	Dichloromethane					-124.2		177.8	101.2	-95.4		270.2	51.0
CH_2F_2	Difluoromethane									-452.3		246.7	42.9
CH_2I_2	Diiodomethane					68.5	90.4	174.1	134.0	119.5	95.8	309.7	57.7
CH_2N_2	Diazomethane											242.9	52.5
CH_2N_2	Cyanamide	58.8											
$CH_2N_2O_4$	Dinitromethane					-104.9				-61.5		358.1	86.4
CH_2O	Formaldehyde									-108.6	-102.5	218.8	35.4

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$(CH_2O)_x$	Paraformaldehyde	-177.6											
CH_2O_2	Formic acid					-425.0	-361.4	129.0	99.0	-378.7			
CH_2S_3	Trithiocarbonic acid					24.0							
CH_3	Methyl									145.7	147.9	194.2	38.7
CH_3BO	Borane carbonyl									-111.2	-92.9	249.4	59.5
CH_3Br	Bromomethane					-59.8				-35.4	-26.3	246.4	42.4
CH_3Cl	Chloromethane									-81.9		234.6	40.8
CH_3Cl_3Si	Methyltrichlorosilane							262.8	163.1	-528.9		351.1	102.4
CH_3F	Fluoromethane											222.9	37.5
CH_3I	Iodomethane					-13.6		163.2	126.0	14.4		254.1	44.1
CH_3NO	Formamide					-254.0				-193.9			
CH_3NO_2	Nitromethane					-112.6	-14.4	171.8	106.6	-80.8		282.9	55.5
CH_3NO_2	Methyl nitrite									-66.1			
CH_3NO_3	Methyl nitrate					-156.3	-43.4	217.1	157.3	-122.0		305.8	76.6
CH_4	Methane									-74.6	-50.5	186.3	35.7
CH_4N_2	Ammonium cyanide	0.4			134.0								
CH_4N_2O	Urea	-333.1								-245.8			
CH_4N_2S	Thiourea	-89.1								22.9			
$CH_4N_4O_2$	Nitroguanidine	-92.4											
CH_4O	Methanol					-239.2	-166.6	126.8	81.1	-201.0	-162.3	239.9	44.1
CH_4S	Methanethiol					-46.7	-7.7	169.2	90.5	-22.9	-9.3	255.2	50.3
CH_5N	Methylamine					-47.3	35.7	150.2	102.1	-22.5	32.7	242.9	50.1
CH_5NO_3	Ammonium hydrogen carbonate	-849.4	-665.9	120.9									
CH_5N_3	Guanidine	-56.0											
CH_5N_3S	Hydrazinecarbothioamide	24.7											
$CH_5N_5O_2$	3-Amino-1-nitroguanidine	22.1											
CH_6ClN	Methylamine hydrochloride	-298.1											
CH_6N_2	Methylhydrazine					54.2	180.0	165.9	134.9	94.7	187.0	278.8	71.1
CH_6Si	Methylsilane											256.5	65.9
CHg_2O_3	Mercury(I) carbonate	-553.5	-468.1	180.0									
CIN	Cyanogen iodide	166.2	185.0	96.2						225.5	196.6	256.8	48.3
CI_4	Tetraiodomethane	-392.9								474.0		391.9	95.9
CKN	Potassium cyanide	-113.0	-101.9	128.5	66.3								
CKNS	Potassium thiocyanate	-200.2	-178.3	124.3	88.5								
CK_2O_3	Potassium carbonate	-1151.0	-1063.5	155.5	114.4								
CLi_2O_3	Lithium carbonate	-1215.9	-1132.1	90.4	99.1								
$CMgO_3$	Magnesium carbonate	-1095.8	-1012.1	65.7	75.5								
$CMnO_3$	Manganese(II) carbonate	-894.1	-816.7	85.8	81.5								
CN	Cyanide									437.6	407.5	202.6	29.2
CNNa	Sodium cyanide	-87.5	-76.4	115.6	70.4								
CNNaO	Sodium cyanate	-405.4	-358.1	96.7	86.6								
CN_4O_8	Tetranitromethane					38.4				82.4		503.7	176.1
CNa_2O_3	Sodium carbonate	-1130.7	-1044.4	135.0	112.3								
CO	Carbon monoxide									-110.5	-137.2	197.7	29.1
COS	Carbon oxysulfide									-142.0	-169.2	231.6	41.5
CO_2	Carbon dioxide									-393.5	-394.4	213.8	37.1
CO_3Pb	Lead(II) carbonate	-699.1	-625.5	131.0	87.4								
CO_3Rb_2	Rubidium carbonate	-1136.0	-1051.0	181.3	117.6								
CO_3Sr	Strontium carbonate	-1220.1	-1140.1	97.1	81.4								
CO_3Tl_2	Thallium(I) carbonate	-700.0	-614.6	155.2									
CO_3Zn	Zinc carbonate	-812.8	-731.5	82.4	79.7								
CS	Carbon monosulfide									280.3	228.8	210.6	29.8
CS_2	Carbon disulfide					89.0	64.6	151.3	76.4	116.7	67.1	237.8	45.4
CSe_2	Carbon diselenide					164.8							
CSi	Silicon carbide (cubic)	-65.3	-62.8	16.6	26.9								
CSi	Silicon carbide (hexagonal)	-62.8	-60.2	16.5	26.7								
C_2	Dicarbon									831.9	775.9	199.4	43.2
C_2BrF_5	Bromopentafluoroethane									-1064.4			
$C_2Br_2ClF_3$	1,2-Dibromo-1-chloro-1,2,2-trifluoroethane					-691.7				-656.6			
$C_2Br_2F_4$	1,2-Dibromotetrafluoroethane					-817.7				-789.1			
C_2Br_4	Tetrabromoethene											387.1	102.7
C_2Br_6	Hexabromoethane											441.9	139.3
C_2Ca	Calcium carbide	-59.8	-64.9	70.0	62.7								
C_2CaN_2	Calcium cyanide	-184.5											
C_2CaO_4	Calcium oxalate	-1360.6											

Molecular formula	Name	Crystal				Liquid				Gas			
		$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
C_2ClF_3	Chlorotrifluoroethene					-522.7				-505.5	-523.8	322.1	83.9
C_2ClF_5	Chloropentafluoroethane									-1118.8			184.2
$C_2Cl_2F_4$	1,2-Dichloro-1,1,2,2-tetrafluoroethane					-960.2			111.7	-937.0			
$C_2Cl_2O_2$	Oxalyl chloride					-367.6				-335.8			
$C_2Cl_3F_3$	1,1,2-Trichloro-1,2,2-trifluoroethane					-745.0			170.1	-716.8			
C_2Cl_3N	Trichloroacetonitrile											336.6	96.1
C_2Cl_4	Tetrachloroethene					-50.6	3.0	266.9	143.4	-10.9			
$C_2Cl_4F_2$	1,1,1,2-Tetrachloro-2,2-difluoroethane									-489.9	-407.0	382.9	123.4
$C_2Cl_4F_2$	1,1,2,2-Tetrachloro-1,2-difluoroethane								173.6				
C_2Cl_4O	Trichloroacetyl chloride					-280.8				-239.8			
C_2Cl_6	Hexachloroethane	-202.8		237.3	198.2					-143.6			
C_2F_3N	Trifluoroacetonitrile									-497.9		298.1	77.9
C_2F_4	Tetrafluoroethene	-820.5								-658.9		300.1	80.5
C_2F_6	Hexafluoroethane									-1344.2		332.3	106.7
C_2HBr	Bromoacetylene											253.7	55.7
$C_2HBrClF_3$	1-Bromo-2-chloro-1,1,2-trifluoroethane					-675.3				-644.8			
$C_2HBrClF_3$	2-Bromo-2-chloro-1,1,1-trifluoroethane					-720.0				-690.4			
C_2HCl	Chloroacetylene											242.0	54.3
C_2HClF_2	1-Chloro-2,2-difluoroethene									-315.5	-289.1	303.0	72.1
C_2HCl_2F	1,1-Dichloro-2-fluoroethene											313.9	76.5
$C_2HCl_2F_3$	2,2-Dichloro-1,1,1-trifluoroethane											352.8	102.5
C_2HCl_3	Trichloroethene					-43.6		228.4	124.4	-9.0		324.8	80.3
C_2HCl_3O	Trichloroacetaldehyde					-234.5			151.0	-196.6			
C_2HCl_3O	Dichloroacetyl chloride					-280.4				-241.0			
$C_2HCl_3O_2$	Trichloroacetic acid	-503.3											
C_2HCl_5	Pentachloroethane					-187.6			173.8	-142.0			
C_2HF	Fluoroacetylene											231.7	52.4
C_2HF_3	Trifluoroethene									-490.5			
$C_2HF_3O_2$	Trifluoroacetic acid					-1069.9				-1031.4			
C_2HF_5	Pentafluoroethane									-1100.4			
C_2H_2	Acetylene									227.4	209.9	200.9	44.0
$C_2H_2BrF_3$	2-Bromo-1,1,1-trifluoroethane									-694.5			
$C_2H_2Br_2$	*cis*-1,2-Dibromoethene											311.3	68.8
$C_2H_2Br_2$	*trans*-1,2-Dibromoethene											313.5	70.3
$C_2H_2Br_2Cl_2$	1,2-Dibromo-1,2-dichloroethane									-36.9			
$C_2H_2Br_4$	1,1,2,2-Tetrabromoethane								165.7				
$C_2H_2ClF_3$	2-Chloro-1,1,1-trifluoroethane											326.5	89.1
$C_2H_2Cl_2$	1,1-Dichloroethene					-23.9	24.1	201.5	111.3	2.8	25.4	289.0	67.1
$C_2H_2Cl_2$	*cis*-1,2-Dichloroethene					-26.4		198.4	116.4	4.6		289.6	65.1
$C_2H_2Cl_2$	*trans*-1,2-Dichloroethene					-24.3	27.3	195.9	116.8	5.0	28.6	290.0	66.7
$C_2H_2Cl_2O$	Chloroacetyl chloride					-283.7				-244.8			
$C_2H_2Cl_2O_2$	Dichloroacetic acid					-496.3							
$C_2H_2Cl_3NO$	2,2,2-Trichloroacetamide	-358.0											
$C_2H_2Cl_4$	1,1,1,2-Tetrachloroethane											356.0	102.7
$C_2H_2Cl_4$	1,1,2,2-Tetrachloroethane					-195.0		246.9	162.3	-149.2		362.8	100.8
$C_2H_2F_2$	1,1-Difluoroethene									-335.0		266.2	60.1
$C_2H_2F_2$	*cis*-1,2-Difluoroethene											268.3	58.2
$C_2H_2F_3I$	1,1,1-Trifluoro-2-iodoethane									-644.5			
$C_2H_2I_2$	*cis*-1,2-Diiodoethene									-207.4			
C_2H_2O	Ketene					-67.9				-47.5	-48.3	247.6	51.8
$C_2H_2O_2$	Glyoxal									-212.0	-189.7	272.5	60.6
$C_2H_2O_4$	Oxalic acid	-829.9		109.8	91.0					-731.8	-662.7	320.6	86.2
$C_2H_2O_4Sr$	Strontium formate	-1393.3											
C_2H_2S	Thiirene									300.0	275.8	255.3	54.7
C_2H_3Br	Bromoethene									79.2	81.8	275.8	55.5
C_2H_3BrO	Acetyl bromide					-223.5				-190.4			
$C_2H_3BrO_2$	Bromoacetic acid									-383.5	-338.3	337.0	80.5
C_2H_3Cl	Chloroethene	-94.1			59.4	14.6				37.2	53.6	264.0	53.7
$C_2H_3ClF_2$	1-Chloro-1,1-difluoroethane											307.2	82.5
C_2H_3ClO	Acetyl chloride					-272.9	-208.0	200.8	117.0	-242.8	-205.8	295.1	67.8
$C_2H_3ClO_2$	Chloroacetic acid	-509.7								-427.6	-368.5	325.9	78.8

Molecular formula	Name	Crystal $\Delta_f H°$ kJ/mol	Crystal $\Delta_f G°$ kJ/mol	Crystal $S°$ J/mol K	Crystal C_p J/mol K	Liquid $\Delta_f H°$ kJ/mol	Liquid $\Delta_f G°$ kJ/mol	Liquid $S°$ J/mol K	Liquid C_p J/mol K	Gas $\Delta_f H°$ kJ/mol	Gas $\Delta_f G°$ kJ/mol	Gas $S°$ J/mol K	Gas C_p J/mol K
$C_2H_3Cl_2F$	1,1-Dichloro-1-fluoroethane											320.2	88.7
$C_2H_3Cl_3$	1,1,1-Trichloroethane					-177.4		227.4	144.3	-144.4		323.1	93.3
$C_2H_3Cl_3$	1,1,2-Trichloroethane					-190.8		232.6	150.9	-151.3		337.2	89.0
C_2H_3F	Fluoroethene									-138.8			
C_2H_3FO	Acetyl fluoride					-467.2				-442.1			
$C_2H_3F_3$	1,1,1-Trifluoroethane									-744.6		279.9	78.2
$C_2H_3F_3$	1,1,2-Trifluoroethane									-730.7			
$C_2H_3F_3O$	2,2,2-Trifluoroethanol					-932.4				-888.4			
C_2H_3I	Iodoethene											285.0	57.9
C_2H_3IO	Acetyl iodide					-163.5				-126.4			
$C_2H_3KO_2$	Potassium acetate	-723.0											
C_2H_3N	Acetonitrile					40.6	86.5	149.6	91.5	74.0	91.9	243.4	52.2
C_2H_3N	Isocyanomethane					130.8	159.5	159.0		163.5	165.7	246.9	52.9
C_2H_3NO	Methyl isocyanate					-92.0							
$C_2H_3NO_2$	Nitroethene									33.3		300.5	73.7
$C_2H_3NO_3$	Oxamic acid	-661.2								-552.3			
C_2H_3NS	Methyl isothiocyanate	79.4											
$C_2H_3NaO_2$	Sodium acetate	-708.8	-607.2	123.0	79.9								
C_2H_4	Ethylene									52.4	68.4	219.3	42.9
C_2H_4BrCl	1-Bromo-2-chloroethane								130.1				
$C_2H_4Br_2$	1,1-Dibromoethane					-66.2						327.7	80.8
$C_2H_4Br_2$	1,2-Dibromoethane					-79.2		223.3	136.0	-37.5			
C_2H_4ClF	1-Chloro-1-fluoroethane									-313.4			
$C_2H_4Cl_2$	1,1-Dichloroethane					-158.4	-73.8	211.8	126.3	-127.7	-70.8	305.1	76.2
$C_2H_4Cl_2$	1,2-Dichloroethane					-166.8			128.4	-126.4		308.4	78.7
$C_2H_4F_2$	1,1-Difluoroethane									-497.0		282.5	67.8
$C_2H_4I_2$	1,2-Diiodoethane	9.3								75.0			
$C_2H_4N_2O_2$	Oxamide	-504.4								-387.1			
$C_2H_4N_2O_2$	Ethanedial dioxime	-90.5											
$C_2H_4N_2O_4$	1,1-Dinitroethane					-148.2							
$C_2H_4N_2O_4$	1,2-Dinitroethane					-165.2							
$C_2H_4N_2S_2$	Ethanedithioamide	-20.8								83.0			
$C_2H_4N_4$	1*H*-1,2,4-Triazol-3-amine	76.8											
C_2H_4O	Acetaldehyde					-192.2	-127.6	160.2	89.0	-166.2	-133.0	263.8	55.3
C_2H_4O	Oxirane					-78.0	-11.8	153.9	88.0	-52.6	-13.0	242.5	47.9
C_2H_4OS	Thioacetic acid					-216.9				-175.1			
$C_2H_4O_2$	Acetic acid					-484.3	-389.9	159.8	123.3	-432.2	-374.2	283.5	63.4
$C_2H_4O_2$	Methyl formate					-386.1			119.1	-357.4		285.3	64.4
$C_2H_4O_3$	Peroxyacetic acid												82.4
$C_2H_4O_3$	Glycolic acid									-583.0	-504.9	318.6	87.1
C_2H_4S	Thiirane					51.6				82.0	96.8	255.2	53.3
C_2H_4Si	Ethynylsilane											269.4	72.6
C_2H_5Br	Bromoethane					-90.5	-25.8	198.7	100.8	-61.9	-23.9	286.7	64.5
C_2H_5Cl	Chloroethane					-136.8	-59.3	190.8	104.3	-112.1	-60.4	276.0	62.8
C_2H_5ClO	2-Chloroethanol					-295.4							
C_2H_5F	Fluoroethane											264.5	58.6
C_2H_5I	Iodoethane					-40.0	14.7	211.7	115.1	-8.1	19.2	306.0	66.9
C_2H_5N	Ethyleneimine					91.9				126.5			
C_2H_5NO	Acetamide	-317.0		115.0	91.3					-238.3			
C_2H_5NO	*N*-Methylformamide								123.8				
$C_2H_5NO_2$	Nitroethane					-143.9			134.4	-103.8		320.5	79.0
$C_2H_5NO_2$	Glycine	-528.5								-392.1			
$C_2H_5NO_3$	2-Nitroethanol					-350.7							
$C_2H_5NO_3$	Ethyl nitrate					-190.4				-154.1			
C_2H_5NS	Thioacetamide	-71.7								11.4			
C_2H_6	Ethane									-84.0	-32.0	229.2	52.5
C_2H_6Cd	Dimethyl cadmium					63.6	139.0	201.9	132.0	101.6	146.9	303.0	
C_2H_6Hg	Dimethyl mercury					59.8	140.3	209.0		94.4	146.1	306.0	83.3
$C_2H_6N_2O$	*N*-Methylurea	-332.8											
$C_2H_6N_4O_2$	1,2-Hydrazinedicarboxamide	-498.7											
$C_2H_6N_4O_2$	Oxalyl dihydrazide	-295.2											
C_2H_6O	Ethanol					-277.6	-174.8	160.7	112.3	-234.8	-167.9	281.6	65.6
C_2H_6O	Dimethyl ether					-203.3				-184.1	-112.6	266.4	64.4
C_2H_6OS	Dimethyl sulfoxide					-204.2	-99.9	188.3	153.0	-151.3			
$C_2H_6O_2$	Ethylene glycol					-460.0		163.2	148.6	-392.2		303.8	82.7
$C_2H_6O_2S$	Dimethyl sulfone	-450.1	-302.4	142.0						-373.1	-272.7	310.6	100.0

Molecular formula	Name	Crystal $\Delta_f H°$ kJ/mol	Crystal $\Delta_f G°$ kJ/mol	Crystal $S°$ J/mol K	Crystal C_p J/mol K	Liquid $\Delta_f H°$ kJ/mol	Liquid $\Delta_f G°$ kJ/mol	Liquid $S°$ J/mol K	Liquid C_p J/mol K	Gas $\Delta_f H°$ kJ/mol	Gas $\Delta_f G°$ kJ/mol	Gas $S°$ J/mol K	Gas C_p J/mol K
$C_2H_6O_3S$	Dimethyl sulfite					-523.6				-483.4			
$C_2H_6O_4S$	Dimethyl sulfate					-735.5				-687.0			
C_2H_6S	Ethanethiol					-73.6	-5.5	207.0	117.9	-46.1	-4.8	296.2	72.7
C_2H_6S	Dimethyl sulfide					-65.3		196.4	118.1	-37.4		286.0	74.1
$C_2H_6S_2$	1,2-Ethanedithiol					-54.3				-9.7			
$C_2H_6S_2$	Dimethyl disulfide					-62.6		235.4	146.1	-24.7			
C_2H_6Zn	Dimethyl zinc					23.4		201.6	129.2	53.0			
C_2H_7N	Ethylamine					-74.1			130.0	-47.5	36.3	283.8	71.5
C_2H_7N	Dimethylamine					-43.9	70.0	182.3	137.7	-18.8	68.5	273.1	70.7
C_2H_7NO	Ethanolamine								195.5				
C_2H_8ClN	Dimethylamine hydrochloride	-289.3											
$C_2H_8N_2$	1,2-Ethanediamine					-63.0			172.6	-18.0			
$C_2H_8N_2$	1,1-Dimethylhydrazine					48.9	206.4	198.0	164.1	84.1			
$C_2H_8N_2$	1,2-Dimethylhydrazine					52.7				92.2			
$C_2H_8N_2O_4$	Ammonium oxalate	-1123.0			226.0								
C_2HgO_4	Mercury(II) oxalate	-678.2											
C_2I_2	Diiodoacetylene											313.1	70.3
C_2I_4	Tetraiodoethene	305.0											
$C_2K_2O_4$	Potassium oxalate	-1346.0											
C_2MgO_4	Magnesium oxalate	-1269.0											
C_2N_2	Cyanogen					285.9				306.7		241.9	56.8
$C_2N_4O_6$	Trinitroacetonitrile					183.7							
$C_2Na_2O_4$	Sodium oxalate									-1318.0			
C_2O_4Pb	Lead(II) oxalate	-851.4	-750.1	146.0	105.4								
C_3F_8	Perfluoropropane									-1783.2			
$C_3H_2N_2$	Malononitrile	186.4								265.5			
$C_3H_2O_2$	2-Propynoic acid					-193.2							
$C_3H_2O_3$	1,3-Dioxol-2-one					-459.9				-418.6			
$C_3H_3Cl_3$	1,2,3-Trichloropropene					-101.8							
$C_3H_3F_3$	3,3,3-Trifluoropropene									-614.2			
C_3H_3N	Acrylonitrile					147.1				180.6			
C_3H_3NO	Oxazole					-48.0				-15.5			
C_3H_3NO	Isoxazole					42.1				78.6			
C_3H_4	Allene									190.5			
C_3H_4	Propyne									184.9			
C_3H_4	Cyclopropene									277.1			
$C_3H_4Cl_2$	2,3-Dichloropropene					-73.3							
$C_3H_4Cl_4$	1,1,1,3-Tetrachloropropane					-208.7							
$C_3H_4Cl_4$	1,2,2,3-Tetrachloropropane					-251.8							
$C_3H_4F_4O$	2,2,3,3-Tetrafluoro-1-propanol					-1114.9				-1061.3			
$C_3H_4N_2$	1*H*-Pyrazole	105.4			81.0					179.4			
$C_3H_4N_2$	Imidazole	49.8								132.9			
C_3H_4O	Acrolein												71.3
$C_3H_4O_2$	1,2-Propanedione					-309.1				-271.0			
$C_3H_4O_2$	Acrylic acid					-383.8			145.7				
$C_3H_4O_2$	2-Oxetanone					-329.9		175.3	122.1	-282.9			
$C_3H_4O_3$	Ethylene carbonate					-682.8			133.9	-508.4			
C_3H_5Br	*cis*-1-Bromopropene					7.9				40.8			
C_3H_5Br	3-Bromopropene					12.2				45.2			
C_3H_5BrO	Bromoacetone									-181.0			
C_3H_5Cl	2-Chloropropene									-21.0			
C_3H_5Cl	3-Chloropropene								125.1				
C_3H_5ClO	Epichlorohydrin					-148.4			131.6	-107.8			
$C_3H_5ClO_2$	2-Chloropropanoic acid					-522.5				-475.8			
$C_3H_5ClO_2$	3-Chloropropanoic acid	-549.3											
$C_3H_5ClO_2$	Ethyl chloroformate					-505.3				-462.9			
$C_3H_5ClO_2$	Methyl chloroacetate					-487.0				-444.0			
$C_3H_5Cl_3$	1,2,3-Trichloropropane					-230.6			183.6	-182.9			
C_3H_5I	3-Iodopropene					53.7				91.5			
C_3H_5IO	Iodoacetone									-130.5			
$C_3H_5IO_2$	3-Iodopropanoic acid	-460.0											
C_3H_5N	Propanenitrile					15.5			119.3	51.7			
C_3H_5N	2-Propyn-1-amine					205.7							
C_3H_5N	Ethyl isocyanide					108.6				141.7			
C_3H_5NO	Acrylamide	-212.1			110.6	-224.0				-130.2			
$C_3H_5NO_3$	Nitroacetone					-278.6							

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_3H_5NO_4$	Methyl nitroacetate					-464.0							
$C_3H_5N_3O_9$	Trinitroglycerol					-370.9				-279.1		545.9	234.2
C_3H_6	Propene					4.0				20.0			
C_3H_6	Cyclopropane					35.2				53.3	104.5	237.5	55.6
$C_3H_6Br_2$	1,2-Dibromopropane					-113.6				-71.6			
$C_3H_6Cl_2$	1,2-Dichloropropane, (±)					-198.8			149.1	-162.8			
$C_3H_6Cl_2$	1,3-Dichloropropane					-199.9				-159.2			
$C_3H_6Cl_2$	2,2-Dichloropropane					-205.8				-173.2			
$C_3H_6Cl_2O$	2,3-Dichloro-1-propanol					-381.5				-316.3			
$C_3H_6Cl_2O$	1,3-Dichloro-2-propanol					-385.3				-318.4			
$C_3H_6I_2$	1,2-Diiodopropane									35.6			
$C_3H_6I_2$	1,3-Diiodopropane					-9.0							
$C_3H_6N_2O_2$	Propanediamide	-546.1											
$C_3H_6N_2O_2$	*N*-(Aminocarbonyl)acetamide	-544.2								-441.2			
$C_3H_6N_2O_4$	1,1-Dinitropropane					-163.2				-100.7			
$C_3H_6N_2O_4$	1,3-Dinitropropane					-207.1							
$C_3H_6N_2O_4$	2,2-Dinitropropane					-181.2							
$C_3H_6N_6O_6$	Hexahydro-1,3,5-trinitro-1,3,5-triazine									192.0		482.4	230.2
C_3H_6O	Allyl alcohol					-171.8			138.9	-124.5			
C_3H_6O	Propanal					-215.6				-185.6		304.5	80.7
C_3H_6O	Acetone					-248.4		199.8	126.3	-217.1	-152.7	295.3	74.5
C_3H_6O	Methyloxirane					-123.0		196.5	120.4	-94.7		286.9	72.6
C_3H_6O	Oxetane					-110.8				-80.5			
$C_3H_6O_2$	Propanoic acid					-510.7		191.0	152.8	-455.7			
$C_3H_6O_2$	Ethyl formate								149.3				
$C_3H_6O_2$	Methyl acetate					-445.9			141.9	-413.3		324.4	86.0
$C_3H_6O_2$	1,3-Dioxolane					-333.5			118.0	-298.0			
$C_3H_6O_2S$	Thiolactic acid					-468.4							
$C_3H_6O_3$	1,3,5-Trioxane	-522.5		133.0	111.4					-465.9			
C_3H_6S	Thietane					24.7		184.9		60.6	107.1	285.0	68.3
C_3H_6S	Methylthiirane					11.3				45.8			
$C_3H_6S_2$	1,2-Dithiolane									0.0	47.7	313.5	86.5
$C_3H_6S_2$	1,3-Dithiolane									10.0	54.7	323.3	84.7
$C_3H_6S_3$	1,3,5-Trithiane									80.0	130.4	336.4	111.3
C_3H_7Br	1-Bromopropane					-121.9				-87.0			
C_3H_7Br	2-Bromopropane					-130.5				-99.4			
C_3H_7Cl	1-Chloropropane					-160.5				-131.9			
C_3H_7Cl	2-Chloropropane					-172.3				-144.9			
$C_3H_7ClO_2$	3-Chloro-1,2-propanediol					-525.3							
$C_3H_7ClO_2$	2-Chloro-1,3-propanediol					-517.5							
C_3H_7F	1-Fluoropropane									-285.9			
C_3H_7F	2-Fluoropropane									-293.5			
C_3H_7I	1-Iodopropane					-66.0				-30.0			
C_3H_7I	2-Iodopropane					-74.8				-40.3			
C_3H_7N	Allylamine					-10.0							
C_3H_7N	Cyclopropylamine					45.8		187.7	147.1	77.0			
C_3H_7NO	*N,N*-Dimethylformamide					-239.3			150.6	-192.4			
C_3H_7NO	Propanamide	-338.2								-259.0			
$C_3H_7NO_2$	1-Nitropropane					-167.2				-124.3		350.0	104.1
$C_3H_7NO_2$	2-Nitropropane					-180.3			170.3	-138.9			
$C_3H_7NO_2$	Ethyl carbamate	-517.1			156.4	-497.3				-446.3			
$C_3H_7NO_2$	*DL*-Alanine	-563.6											
$C_3H_7NO_2$	*D*-Alanine	-561.2											
$C_3H_7NO_2$	*L*-Alanine	-604.0								-465.9			
$C_3H_7NO_2$	β-Alanine	-558.0								-424.0			
$C_3H_7NO_2$	Sarcosine	-513.3								-367.3			
$C_3H_7NO_2S$	*L*-Cysteine	-534.1											
$C_3H_7NO_3$	Propyl nitrate					-214.5				-174.1		362.6	123.2
$C_3H_7NO_3$	Isopropyl nitrate					-229.7				-191.0			
$C_3H_7NO_3$	*DL*-Serine	-739.0											
$C_3H_7NO_3$	*L*-Serine	-732.7											
C_3H_8	Propane					-120.9				-103.8	-23.4	270.3	73.6
$C_3H_8N_2O$	*N*-Ethylurea	-357.8											
$C_3H_8N_2O$	*N,N*-Dimethylurea	-319.1											
$C_3H_8N_2O$	*N,N*-Dimethylurea	-312.1											

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_3H_8N_2O_3$	Oxymethurea	-717.0											
C_3H_8O	1-Propanol					-302.6		193.6	143.9	-255.1		322.6	85.6
C_3H_8O	2-Propanol					-318.1		181.1	156.5	-272.6		309.2	89.3
C_3H_8O	Ethyl methyl ether									-216.4		309.2	93.3
$C_3H_8O_2$	1,2-Propylene glycol					-501.0			190.8	-429.8			
$C_3H_8O_2$	1,3-Propylene glycol					-480.8				-408.0			
$C_3H_8O_2$	Ethylene glycol monomethyl ether								171.1				
$C_3H_8O_2$	Dimethoxymethane					-377.8		244.0	162.0	-348.5			
$C_3H_8O_3$	Glycerol					-669.6		206.3	218.9	-577.9			
C_3H_8S	1-Propanethiol					-99.9		242.5	144.6	-67.8			
C_3H_8S	2-Propanethiol					-105.9		233.5	145.3	-76.2			
C_3H_8S	Ethyl methyl sulfide					-91.6		239.1	144.6	-59.6			
$C_3H_8S_2$	1,3-Propanedithiol					-79.4				-29.8			
C_3H_9Al	Trimethyl aluminum					-136.4	-9.9	209.4	155.6	-74.1			
C_3H_9B	Trimethylborane					-143.1	-32.1	238.9		-124.3	-35.9	314.7	88.5
$C_3H_9BO_3$	Trimethyl borate								189.9				
C_3H_9ClSi	Trimethylchlorosilane					-382.8	-246.4	278.2		-352.8	-243.5	369.1	
C_3H_9N	Propylamine					-101.5			164.1	-70.1	39.9	325.4	91.2
C_3H_9N	Isopropylamine					-112.3		218.3	163.8	-83.7	32.2	312.2	97.5
C_3H_9N	Trimethylamine					-45.7		208.5	137.9	-23.6		287.1	91.8
$C_3H_{10}ClN$	Propylamine hydrochloride	-354.7											
$C_3H_{10}ClN$	Trimethylamine hydrochloride	-282.9											
$C_3H_{10}N_2$	1,2-Propanediamine, (±)					-97.8				-53.6			
$C_3H_{10}Si$	Trimethylsilane											331.0	117.9
$C_3H_{12}BN$	Trimethylamine borane	-142.5	70.7	187.0									
$C_3H_{12}BN$	Aminetrimethylboron	-284.1	-79.3	218.0									
C_4Cl_6	Hexachloro-1,3-butadiene					-24.5							
C_4F_8	Perfluorocyclobutane									-1542.6			
C_4F_{10}	Perfluorobutane								127.2				
$C_4H_2N_2$	*trans*-2-Butenedinitrile	268.2								340.2			
$C_4H_2O_3$	Maleic anhydride	-469.8								-398.3			
$C_4H_2O_4$	2-Butynedioic acid	-577.3											
$C_4H_3NO_3$	2-Nitrofuran	-104.1								-28.8			
$C_4H_4BrNO_2$	*N*-Bromosuccinimide	-335.9											
$C_4H_4ClNO_2$	*N*-Chlorosuccinimide	-357.9											
$C_4H_4N_2$	Succinonitrile	139.7		191.6	145.6					209.7			
$C_4H_4N_2$	Pyrazine	139.8								196.1			
$C_4H_4N_2$	Pyrimidine					145.9				195.7			
$C_4H_4N_2$	Pyridazine					224.9				278.3			
$C_4H_4N_2O_2$	Uracil	-429.4			120.5					-302.9			
$C_4H_4N_2O_3$	Barbituric acid	-634.7											
C_4H_4O	Furan					-62.3		177.0	114.8	-34.8		267.2	65.4
$C_4H_4O_2$	Diketene					-233.1				-190.3			
$C_4H_4O_3$	Succinic anhydride	-608.6								-527.9			
$C_4H_4O_4$	Maleic acid	-789.4		160.8	137.0					-679.4			
$C_4H_4O_4$	Fumaric acid	-811.7		168.0	142.0					-675.8			
C_4H_4S	Thiophene					80.2		181.2	123.8	114.9	126.1	278.8	72.8
C_4H_5N	*trans*-2-Butenenitrile					95.1				134.3			
C_4H_5N	3-Butenenitrile					117.8				159.7			
C_4H_5N	2-Methylacrylonitrile								126.3				
C_4H_5N	Pyrrole					63.1		156.4	127.7	108.2			
C_4H_5N	Cyclopropanecarbonitrile					140.8				182.8			
$C_4H_5NO_2$	Succinimide	-459.0								-375.4			
C_4H_5NS	4-Methylthiazole					67.9				111.8			
$C_4H_5N_3O$	Cytosine	-221.3			132.6								
C_4H_6	1,2-Butadiene					138.6				162.3			
C_4H_6	1,3-Butadiene					88.5		199.0	123.6	110.0			
C_4H_6	1-Butyne					141.4				165.2			
C_4H_6	2-Butyne					119.1				145.7			
C_4H_6	Cyclobutene									156.7			
$C_4H_6N_2O_2$	2,5-Piperazinedione	-446.5											
C_4H_6O	Divinyl ether					-39.8				-13.6			
C_4H_6O	*trans*-2-Butenal					-138.7				-100.6			
$C_4H_6O_2$	*trans*-2-Butenoic acid												
$C_4H_6O_2$	Methacrylic acid								161.1				
$C_4H_6O_2$	Vinyl acetate					-349.2				-314.4			

Molecular formula	Name	Crystal				Liquid				Gas			
		$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_4H_6O_2$	Methyl acrylate					-362.2		239.5	158.8	-333.0			
$C_4H_6O_2$	γ-Butyrolactone					-420.9			141.4	-366.5			
$C_4H_6O_3$	Acetic anhydride					-624.4				-572.5			
$C_4H_6O_3$	Propylene carbonate					-613.2			218.6	-582.5			
$C_4H_6O_4$	Succinic acid	-940.5		167.3	153.1					-823.0			
$C_4H_6O_4$	Dimethyl oxalate	-756.3								-708.9			
C_4H_6S	2,3-Dihydrothiophene					52.9				90.7	133.5	303.5	79.8
C_4H_6S	2,5-Dihydrothiophene					47.0				86.9	131.6	297.1	83.3
C_4H_7ClO	2-Chloroethyl vinyl ether					-208.1				-170.1			
$C_4H_7ClO_2$	2-Chlorobutanoic acid					-575.5							
$C_4H_7ClO_2$	3-Chlorobutanoic acid					-556.3							
$C_4H_7ClO_2$	4-Chlorobutanoic acid					-566.3							
$C_4H_7ClO_2$	Propyl chlorocarbonate					-533.4				-492.7			
C_4H_7N	Butanenitrile					-5.8				33.6			
C_4H_7N	2-Methylpropanenitrile					-13.8				23.4			
C_4H_7NO	Acetone cyanohydrin					-120.9							
C_4H_7NO	2-Pyrrolidone					-286.2							
C_4H_7NO	2-Methyl-2-oxazoline					-169.5				-130.5			
$C_4H_7NO_4$	Iminodiacetic acid	-932.6											
$C_4H_7NO_4$	Ethyl nitroacetate					-487.1							
$C_4H_7NO_4$	*L*-Aspartic acid	-973.3											
$C_4H_7N_3O$	Creatinine	-238.5											
C_4H_8	1-Butene					-20.8		227.0	118.0	0.1			
C_4H_8	*cis*-2-Butene					-29.8		219.9	127.0	-7.1			
C_4H_8	*trans*-2-Butene					-33.3				-11.4			
C_4H_8	Isobutene					-37.5				-16.9			
C_4H_8	Cyclobutane					3.7				27.7			
C_4H_8	Methylcyclopropane					1.7							
$C_4H_8Br_2$	1,2-Dibromobutane					-142.1				-91.6			
$C_4H_8Br_2$	1,3-Dibromobutane					-148.0							
$C_4H_8Br_2$	1,4-Dibromobutane					-140.3				-87.8			
$C_4H_8Br_2$	2,3-Dibromobutane					-139.6				-102.0			
$C_4H_8Br_2$	1,2-Dibromo-2-methylpropane					-156.6				-113.3			
$C_4H_8Cl_2$	1,3-Dichlorobutane					-237.3				-195.0			
$C_4H_8Cl_2$	1,4-Dichlorobutane					-229.8				-183.4			
$C_4H_8Cl_2O$	Bis(2-chloroethyl) ether								220.9				
$C_4H_8I_2$	1,4-Diiodobutane					-30.0							
$C_4H_8N_2O_2$	Succinamide	-581.2											
$C_4H_8N_2O_2$	Dimethylglyoxime	-199.7											
$C_4H_8N_2O_3$	*L*-Asparagine	-789.4											
$C_4H_8N_2O_3$	*N*-Glycylglycine	-747.7											
$C_4H_8N_2O_4$	1,4-Dinitrobutane					-237.5							
$C_4H_8N_8O_8$	Cyclotetramethylenetetranitramine									187.9		568.8	275.5
C_4H_8O	Ethyl vinyl ether					-167.4				-140.8			
C_4H_8O	1,2-Epoxybutane					-168.9		230.9	147.0				
C_4H_8O	Butanal					-239.2		246.6	163.7	-204.8		343.7	103.4
C_4H_8O	Isobutanal					-247.3				-215.7			
C_4H_8O	2-Butanone					-273.3		239.1	158.7	-238.5		339.9	101.7
C_4H_8O	Tetrahydrofuran					-216.2		204.3	124.0	-184.1		302.4	76.3
C_4H_8OS	*S*-Ethyl thioacetate					-268.2				-228.1			
$C_4H_8O_2$	Butanoic acid					-533.8		222.2	178.6	-475.9			
$C_4H_8O_2$	2-Methylpropanoic acid								173.0				
$C_4H_8O_2$	Propyl formate					-500.3				-462.7			
$C_4H_8O_2$	Ethyl acetate					-479.3		257.7	170.7	-443.6			
$C_4H_8O_2$	Methyl propanoate								171.2				
$C_4H_8O_2$	1,3-Dioxane					-379.7			143.9	-340.6			
$C_4H_8O_2$	1,4-Dioxane					-353.9		270.2	152.1	-315.3			
$C_4H_8O_2$	2-Methyl-1,3-dioxolane					-386.9				-352.0			
$C_4H_8O_2S$	Sulfolane								180.0				
C_4H_8S	Tetrahydrothiophene					-72.9				-34.1	45.8	309.6	92.5
$C_4H_8S_2$	1,3-Dithiane									-10.0	72.4	333.5	110.4
$C_4H_8S_2$	1,4-Dithiane									0.0	84.5	326.2	109.7
C_4H_9Br	1-Bromobutane					-143.8				-107.1			
C_4H_9Br	2-Bromobutane, (±)					-154.9				-120.3			
C_4H_9Br	2-Bromo-2-methylpropane					-164.4				-132.4			
C_4H_9Cl	1-Chlorobutane					-188.1				-154.4			

Molecular formula	Name	Crystal				Liquid				Gas			
		$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
C_4H_9Cl	2-Chlorobutane					-192.8				-161.1			
C_4H_9Cl	1-Chloro-2-methylpropane					-191.1				-159.3			
C_4H_9Cl	2-Chloro-2-methylpropane					-211.3				-182.2			
C_4H_9ClO	2-Chloroethyl ethyl ether					-335.6				-301.3			
C_4H_9I	1-Iodo-2-methylpropane								162.3				
C_4H_9I	2-Iodo-2-methylpropane					-107.5				-72.1			
C_4H_9N	Cyclobutanamine					5.6				41.2			
C_4H_9N	Pyrrolidine					-41.1		204.1	156.6	-3.6			
C_4H_9NO	Butanamide	-364.8								-282.0			
C_4H_9NO	*N*-Methylpropanamide								179.0				
C_4H_9NO	2-Methylpropanamide	-368.6								-282.6			
C_4H_9NO	*N,N*-Dimethylacetamide					-278.3			175.6	-228.0			
C_4H_9NO	Morpholine								164.8				
$C_4H_9NO_2$	1-Nitrobutane					-192.5				-143.9		369.9	115.1
$C_4H_9NO_2$	2-Nitroisobutane					-217.2				-177.1			
$C_4H_9NO_2$	Propyl carbamate	-552.6								-471.4			
$C_4H_9NO_2$	4-Aminobutanoic acid	-581.0								-441.0			
$C_4H_9NO_3$	3-Nitro-2-butanol					-390.0							
$C_4H_9NO_3$	2-Methyl-2-nitro-1-propanol	-410.1											
$C_4H_9NO_3$	*DL*-Threonine	-758.8											
$C_4H_9NO_3$	*L*-Threonine	-807.2											
$C_4H_9N_3O_2$	Creatine	-537.2											
C_4H_{10}	Butane					-147.3			140.9	-125.7			
C_4H_{10}	Isobutane					-154.2				-134.2			
$C_4H_{10}Hg$	Diethyl mercury					30.1			182.8	75.3			
$C_4H_{10}N_2$	Piperazine	-45.6											
$C_4H_{10}N_2O$	Trimethylurea	-330.5											
$C_4H_{10}N_2O_2$	*N*-Nitrodiethylamine					-106.2				-53.0			
$C_4H_{10}N_2O_4$	*L*-Asparagine, monohydrate	-1086.6											
$C_4H_{10}O$	1-Butanol					-327.3		225.8	177.2	-274.9			
$C_4H_{10}O$	2-Butanol					-342.6		214.9	196.9	-292.8		359.5	112.7
$C_4H_{10}O$	2-Methyl-1-propanol					-334.7		214.7	181.5	-283.8			
$C_4H_{10}O$	2-Methyl-2-propanol					-359.2		193.3	218.6	-312.5		326.7	113.6
$C_4H_{10}O$	Diethyl ether					-279.5		172.4	175.6	-252.1		342.7	119.5
$C_4H_{10}O$	Methyl propyl ether					-266.0		262.9	165.4	-238.1			
$C_4H_{10}O$	Isopropyl methyl ether					-278.8		253.8	161.9	-252.0			
$C_4H_{10}OS$	Diethyl sulfoxide					-268.0				-205.6			
$C_4H_{10}O_2$	1,2-Butanediol, (±)					-523.6							
$C_4H_{10}O_2$	1,3-Butanediol					-501.0				-433.2			
$C_4H_{10}O_2$	1,4-Butanediol					-505.3		223.4	200.1	-428.7			
$C_4H_{10}O_2$	2,3-Butanediol					-541.5			213.0	-482.3			
$C_4H_{10}O_2$	2-Methyl-1,2-propanediol					-539.7							
$C_4H_{10}O_2$	Ethylene glycol monoethyl ether								210.8				
$C_4H_{10}O_2$	Ethylene glycol dimethyl ether					-376.6			193.3				
$C_4H_{10}O_2$	Dimethylacetal					-420.6				-389.7			
$C_4H_{10}O_2$	*tert*-Butyl hydroperoxide					-293.6				-245.9			
$C_4H_{10}O_3$	Diethylene glycol					-628.5			244.8	-571.2			
$C_4H_{10}O_3S$	Diethyl sulfite					-600.7				-552.2			
$C_4H_{10}O_4S$	Diethyl sulfate					-813.2				-756.3			
$C_4H_{10}S$	1-Butanethiol					-124.7			171.2	-88.0			
$C_4H_{10}S$	2-Butanethiol					-131.0				-96.9			
$C_4H_{10}S$	2-Methyl-1-propanethiol					-132.0				-97.3			
$C_4H_{10}S$	2-Methyl-2-propanethiol					-140.5				-109.6			
$C_4H_{10}S$	Diethyl sulfide					-119.4		269.3	171.4	-83.5		368.1	117.0
$C_4H_{10}S$	Methyl propyl sulfide					-118.5		272.5	171.6	-82.2			
$C_4H_{10}S$	Isopropyl methyl sulfide					-124.7		263.1	172.4	-90.5			
$C_4H_{10}S_2$	1,4-Butanedithiol					-105.7				-50.6			
$C_4H_{10}S_2$	Diethyl disulfide					-120.1		269.3	171.4	-79.4			
$C_4H_{11}N$	Butylamine					-127.6			179.2	-91.9			
$C_4H_{11}N$	*sec*-Butylamine					-137.5				-104.6			
$C_4H_{11}N$	*tert*-Butylamine					-150.6			192.1	-121.0			
$C_4H_{11}N$	Isobutylamine					-132.6			183.2	-98.7			
$C_4H_{11}N$	Diethylamine					-103.7			169.2	-72.2			
$C_4H_{11}NO$	*N,N*-Dimethylethanolamine					-253.7				-203.6			
$C_4H_{11}NO_2$	Diethanolamine	-493.8			233.5					-397.1			
$C_4H_{11}NO_3$	Tris(hydroxymethyl)methylamine	-717.8											

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_4H_{12}BrN$	Tetramethylammonium bromide	-251.0											
$C_4H_{12}ClN$	Diethylamine hydrochloride	-358.6											
$C_4H_{12}ClN$	Tetramethylammonium chloride	-276.4											
$C_4H_{12}IN$	Tetramethylammonium iodide	-203.9											
$C_4H_{12}N_2$	2-Methyl-1,2-propanediamine					-133.9				-90.3			
$C_4H_{12}Pb$	Tetramethyl lead					97.9				135.9			
$C_4H_{12}Si$	Tetramethylsilane					-264.0	-100.0	277.3	204.1	-239.1	-99.9	359.0	143.9
$C_4H_{12}Sn$	Tetramethylstannane					-52.3				-18.8			
$C_4H_{13}N_3$	Bis(2-aminoethyl)amine								254.0				
C_4N_2	2-Butynedinitrile					500.4				529.2			
C_4NiO_4	Nickel carbonyl					-633.0	-588.2	313.4	204.6	-602.9	-587.2	410.6	145.2
C_5FeO_5	Iron pentacarbonyl					-774.0	-705.3	338.1	240.6				
$C_5H_2F_6O_2$	Hexafluoroacetylacetone	-2286.7											
$C_5H_3NO_5$	5-Nitro-2-furancarboxylic acid	-516.8											
$C_5H_4N_4$	1*H*-Purine	169.4											
$C_5H_4N_4O$	Hypoxanthine	-110.8		145.6	134.5								
$C_5H_4N_4O_2$	Xanthine	-379.6		161.1	151.3								
$C_5H_4N_4O_3$	Uric acid	-618.8		173.2	166.1								
$C_5H_4O_2$	Furfural					-201.6			163.2	-151.0			
$C_5H_4O_3$	2-Furancarboxylic acid	-498.4								-390.0			
$C_5H_4O_3$	3-Methyl-2,5-furandione					-504.5				-447.2			
$C_5H_5F_3O_2$	1,1,1-Trifluoro-2,4-pentanedione					-1040.2				-993.3			
C_5H_5N	Pyridine					100.2			132.7	140.4			
C_5H_5NO	1*H*-Pyrrole-2-carboxaldehyde	-106.4											
$C_5H_5N_5$	Adenine	96.9			147.0					205.7			
$C_5H_5N_5O$	Guanine	-183.9											
C_5H_6	*cis*-3-Penten-1-yne					226.5							
C_5H_6	*trans*-3-Penten-1-yne					228.2							
C_5H_6	1,3-Cyclopentadiene					105.9				134.3			
$C_5H_6N_2O_2$	Thymine	-462.8			150.8					-328.7			
$C_5H_6O_2$	Furfuryl alcohol					-276.2			204.0	-211.8			
$C_5H_6O_4$	*trans*-1-Propene-1,2-dicarboxylic acid	-824.4											
C_5H_6S	2-Methylthiophene					44.6		218.5	149.8	83.5			
C_5H_6S	3-Methylthiophene					43.1				82.5			
C_5H_7N	*trans*-3-Pentenenitrile					80.9				125.7			
C_5H_7N	Cyclobutanecarbonitrile					103.0				147.4			
C_5H_7N	1-Methylpyrrole					62.4				103.1			
C_5H_7N	2-Methylpyrrole					23.3				74.0			
C_5H_7N	3-Methylpyrrole					20.5				70.2			
$C_5H_7NO_2$	Ethyl cyanoacetate								220.2				
C_5H_8	1,2-Pentadiene									140.7			
C_5H_8	*cis*-1,3-Pentadiene									81.4			
C_5H_8	*trans*-1,3-Pentadiene									76.1			
C_5H_8	1,4-Pentadiene									105.7			
C_5H_8	2,3-Pentadiene									133.1			
C_5H_8	3-Methyl-1,2-butadiene					101.2							
C_5H_8	2-Methyl-1,3-butadiene					48.2		229.3	152.6	75.5			
C_5H_8	Cyclopentene					4.3		201.2	122.4	34.0			
C_5H_8	Spiropentane					157.5		193.7	134.5	185.2			
C_5H_8	Methylenecyclobutane					93.8				121.6			
$C_5H_8N_4O_{12}$	Pentaerythritol tetranitrate	-538.6								-387.0		614.7	294.8
C_5H_8O	Cyclopentanone					-235.9				-192.1			
$C_5H_8O_2$	4-Pentenoic acid					-430.6							
$C_5H_8O_2$	Allyl acetate								184.1				
$C_5H_8O_2$	Ethyl acrylate					-370.6				-354.2			
$C_5H_8O_2$	Methyl *trans*-2-butenoate					-382.9				-341.9			
$C_5H_8O_2$	Methyl methacrylate								191.2				
$C_5H_8O_2$	2,4-Pentanedione					-423.8				-382.0			
$C_5H_8O_2$	Dihydro-4-methyl-2(3*H*)-furanone					-461.3				-406.5			
$C_5H_8O_2$	Tetrahydro-2*H*-pyran-2-one					-436.7				-379.6			
$C_5H_8O_3$	Methyl acetoacetate					-623.2							
$C_5H_8O_4$	Glutaric acid	-960.0											
$C_5H_9ClO_2$	Propyl chloroacetate					-515.5				-467.0			
C_5H_9N	Pentanenitrile					-33.1				10.5			
C_5H_9N	2,2-Dimethylpropanenitrile					-39.8		232.0	179.4	-2.3			

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
C_5H_9N	1,2,5,6-Tetrahydropyridine					33.5							
C_5H_9NO	2-Piperidinone	-306.6											
C_5H_9NO	*N*-Methyl-2-pyrrolidone					-262.2			307.8				
$C_5H_9NO_2$	*L*-Proline	-515.2								-366.2			
$C_5H_9NO_4$	*D*-Glutamic acid	-1005.3											
$C_5H_9NO_4$	*L*-Glutamic acid	-1009.7											
C_5H_{10}	1-Pentene					-46.9		262.6	154.0	-21.1			
C_5H_{10}	*cis*-2-Pentene					-53.7		258.6	151.7	-27.6			
C_5H_{10}	*trans*-2-Pentene					-58.2		256.5	157.0	-31.9			
C_5H_{10}	2-Methyl-1-butene					-61.1		254.0	157.2	-35.2			
C_5H_{10}	3-Methyl-1-butene					-51.5		253.3	156.1	-27.5			
C_5H_{10}	2-Methyl-2-butene					-68.6		251.0	152.8	-41.7			
C_5H_{10}	Cyclopentane					-105.1		204.5	128.8	-76.4			
C_5H_{10}	Methylcyclobutane					-44.5							
C_5H_{10}	Ethylcyclopropane					-24.8							
C_5H_{10}	1,1-Dimethylcyclopropane					-33.3				-8.2			
C_5H_{10}	*cis*-1,2-Dimethylcyclopropane					-26.3							
C_5H_{10}	*trans*-1,2-Dimethylcyclopropane					-30.7							
$C_5H_{10}Br_2$	2,3-Dibromo-2-methylbutane									-137.6			
$C_5H_{10}N_2O$	*N*-Nitrosopiperidine					-31.1				16.6			
$C_5H_{10}N_2O_2$	*N*-Nitropiperidine					-93.0				-44.5			
$C_5H_{10}N_2O_3$	*L*-Glutamine	-826.4											
$C_5H_{10}O$	Cyclopentanol					-300.1		204.1	182.5	-242.5		362.9	
$C_5H_{10}O$	Pentanal					-267.2				-228.4			
$C_5H_{10}O$	2-Pentanone					-297.3			184.1	-258.8			
$C_5H_{10}O$	3-Pentanone					-296.5		266.0	190.9	-257.9			
$C_5H_{10}O$	3-Methyl-2-butanone					-299.5		268.5	179.9	-262.6			
$C_5H_{10}O$	3,3-Dimethyloxetane					-182.2				-148.2			
$C_5H_{10}O$	Tetrahydropyran					-258.3				-223.4			
$C_5H_{10}OS$	S-Propyl thioacetate					-294.5				-250.4			
$C_5H_{10}O_2$	Pentanoic acid					-559.4		259.8	210.3	-491.9			
$C_5H_{10}O_2$	2-Methylbutanoic acid					-554.5							
$C_5H_{10}O_2$	3-Methylbutanoic acid					-561.6				-510.0			
$C_5H_{10}O_2$	2,2-Dimethylpropanoic acid	-564.5								-491.3			
$C_5H_{10}O_2$	Butyl formate								200.2				
$C_5H_{10}O_2$	Propyl acetate								196.2				
$C_5H_{10}O_2$	Isopropyl acetate					-518.9			199.4	-481.6			
$C_5H_{10}O_2$	Ethyl propanoate					-502.7				-463.4			
$C_5H_{10}O_2$	Methyl butanoate								198.2				
$C_5H_{10}O_2$	(Ethoxymethyl)oxirane					-296.5							
$C_5H_{10}O_2$	4-Methyl-1,3-dioxane					-416.1				-376.9			
$C_5H_{10}O_2$	*cis*-1,2-Cyclopentanediol	-485.0											
$C_5H_{10}O_2$	*trans*-1,2-Cyclopentanediol	-490.1											
$C_5H_{10}O_2$	Tetrahydrofurfuryl alcohol					-435.7				-369.1			
$C_5H_{10}O_3$	Diethyl carbonate					-681.5				-637.9			
$C_5H_{10}O_3$	Ethylene glycol monomethyl ether acetate								310.0				
$C_5H_{10}O_3$	Ethyl lactate								254.0				
$C_5H_{10}O_4$	Glycerol 1-acetate, (*DL*)					-909.2							
$C_5H_{10}O_5$	*D*-Ribose	-1047.2											
$C_5H_{10}O_5$	*D*-Xylose	-1057.8											
$C_5H_{10}O_5$	α-*D*-Arabinopyranose	-1057.9											
$C_5H_{10}S$	Thiacyclohexane					-106.3		218.2	163.3	-63.5	53.1	323.0	109.7
$C_5H_{10}S$	Cyclopentanethiol					-89.5		256.9	165.2	-48.1			
$C_5H_{11}Br$	1-Bromopentane					-170.2				-128.9			
$C_5H_{11}Cl$	1-Chloropentane					-213.2				-174.9			
$C_5H_{11}Cl$	1-Chloro-3-methylbutane					-216.0				-179.7			
$C_5H_{11}Cl$	2-Chloro-2-methylbutane					-235.7				-202.2			
$C_5H_{11}Cl$	2-Chloro-3-methylbutane					-226.6				-185.1			
$C_5H_{11}N$	Cyclopentylamine					-95.1		241.0	181.2	-54.9			
$C_5H_{11}N$	Piperidine					-86.4		210.0	179.9	-47.1			
$C_5H_{11}NO$	Pentanamide	-379.5								-290.2			
$C_5H_{11}NO$	2,2-Dimethylpropanamide	-399.7								-313.1			
$C_5H_{11}NO_2$	1-Nitropentane					-215.4				-164.4		390.9	137.1
$C_5H_{11}NO_2$	*DL*-Valine	-628.9											
$C_5H_{11}NO_2$	*L*-Valine	-617.9								-455.1			

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_5H_{11}NO_2$	5-Aminopentanoic acid	-604.1								-460.0			
$C_5H_{11}NO_2S$	*L*-Methionine	-577.5								-413.5			
$C_5H_{11}NO_4$	2-Ethyl-2-nitro-1,3-propanediol	-606.4											
C_5H_{12}	Pentane					-173.5			167.2	-146.9			
C_5H_{12}	Isopentane					-178.4		260.4	164.8	-153.6			
C_5H_{12}	Neopentane					-190.2				-168.0			
$C_5H_{12}N_2O$	Butylurea	-419.5											
$C_5H_{12}N_2O$	*tert*-Butylurea	-417.4											
$C_5H_{12}N_2O$	*N,N*-Diethylurea	-372.2											
$C_5H_{12}N_2O$	Tetramethylurea					-262.2							
$C_5H_{12}N_2S$	Tetramethylthiourea	-38.1								44.9			
$C_5H_{12}O$	1-Pentanol					-351.6			208.1	-294.6			
$C_5H_{12}O$	2-Pentanol					-365.2				-311.0			
$C_5H_{12}O$	3-Pentanol					-368.9			239.7	-314.9			
$C_5H_{12}O$	2-Methyl-1-butanol, (±)					-356.6				-301.4			
$C_5H_{12}O$	3-Methyl-1-butanol					-356.4				-300.7			
$C_5H_{12}O$	2-Methyl-2-butanol					-379.5			247.1	-329.3			
$C_5H_{12}O$	3-Methyl-2-butanol, (±)					-366.6				-313.5			
$C_5H_{12}O$	2,2-Dimethyl-1-propanol					-399.4							
$C_5H_{12}O$	Butyl methyl ether					-290.6		295.3	192.7	-258.1			
$C_5H_{12}O$	Methyl *tert*-butyl ether					-313.6		265.3	187.5	-283.7			
$C_5H_{12}O$	Ethyl propyl ether					-303.6		295.0	197.2	-272.0			
$C_5H_{12}O_2$	1,5-Pentanediol					-528.8				-450.8			
$C_5H_{12}O_2$	2,2-Dimethyl-1,3-propanediol	-551.2											
$C_5H_{12}O_2$	Diethoxymethane					-450.5				-414.7			
$C_5H_{12}O_2$	1,1-Dimethoxypropane					-443.6							
$C_5H_{12}O_2$	2,2-Dimethoxypropane					-459.4				-429.9			
$C_5H_{12}O_3$	Diethylene glycol monomethyl ether								271.1				
$C_5H_{12}O_3$	2-(Hydroxymethyl)-2-methyl-1,3-propanediol	-744.6											
$C_5H_{12}O_4$	Pentaerythritol	-920.6								-776.7			
$C_5H_{12}O_5$	Xylitol	-1118.5											
$C_5H_{12}S$	1-Pentanethiol					-151.3				-110.0			
$C_5H_{12}S$	2-Methyl-1-butanethiol, (+)					-154.4				-114.9			
$C_5H_{12}S$	3-Methyl-1-butanethiol					-154.4				-114.9			
$C_5H_{12}S$	2-Methyl-2-butanethiol					-162.8		290.1	198.1	-127.1			
$C_5H_{12}S$	3-Methyl-2-butanethiol					-158.8				-121.3			
$C_5H_{12}S$	2,2-Dimethyl-1-propanethiol					-165.4				-129.0			
$C_5H_{12}S$	Butyl methyl sulfide					-142.9		307.5	200.9	-102.4			
$C_5H_{12}S$	*tert*-Butyl methyl sulfide					-157.1		276.1	199.9	-121.3			
$C_5H_{12}S$	Ethyl propyl sulfide					-144.8		309.5	198.4	-104.8			
$C_5H_{12}S$	Ethyl isopropyl sulfide					-156.1				-118.3			
$C_5H_{13}N$	Pentylamine								218.0				
$C_5H_{14}N_2$	*N,N,N′,N′*-Tetramethylmethanediamine					-51.1				-18.2			
C_6ClF_5	Chloropentafluorobenzene	-858.4								-809.3			
C_6Cl_6	Hexachlorobenzene	-127.6		260.2	201.2					-35.5			
C_6F_6	Hexafluorobenzene					-991.3		280.8	221.6	-955.4			
C_6F_{10}	Perfluorocyclohexene					-1963.5				-1932.7			
C_6F_{12}	Perfluorocyclohexane					-2406.3				-2370.4			
C_6HCl_5O	Pentachlorophenol	-292.5		253.2	202.0								
C_6HF_5	Pentafluorobenzene	-852.7				-841.8				-806.5			
C_6HF_5O	Pentafluorophenol	-1024.1				-1007.7							
$C_6H_2F_4$	1,2,4,5-Tetrafluorobenzene					-683.8							
$C_6H_3Cl_3$	1,2,3-Trichlorobenzene	-70.8								3.8			
$C_6H_3Cl_3$	1,2,4-Trichlorobenzene					-63.1				-8.1			
$C_6H_3Cl_3$	1,3,5-Trichlorobenzene	-78.4								-13.4			
$C_6H_3N_3O_6$	1,3,5-Trinitrobenzene	-37.0			214.6								
$C_6H_3N_3O_7$	2,4,6-Trinitrophenol	-217.9			239.7								
$C_6H_3N_3O_8$	2,4,6-Trinitro-1,3-benzenediol	-467.5											
$C_6H_4ClNO_2$	1-Chloro-4-nitrobenzene	-48.7			250.2								
$C_6H_4Cl_2$	*o*-Dichlorobenzene					-17.5			162.4	30.2			
$C_6H_4Cl_2$	*m*-Dichlorobenzene					-20.7				25.7			
$C_6H_4Cl_2$	*p*-Dichlorobenzene	-42.3		175.4	147.8					22.5			
$C_6H_4Cl_2O$	2,4-Dichlorophenol	-226.4								-156.3			
$C_6H_4F_2$	*o*-Difluorobenzene					-330.0		222.6	159.0	-293.8			
$C_6H_4F_2$	*m*-Difluorobenzene					-343.9		223.8	159.1	-309.2			

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_6H_4F_2$	*p*-Difluorobenzene					-342.3			157.5	-306.7			
$C_6H_4N_2O_4$	1,2-Dinitrobenzene	-2.0			200.4								
$C_6H_4N_2O_4$	1,3-Dinitrobenzene	-27.0			197.5	-36.0							
$C_6H_4N_2O_4$	1,4-Dinitrobenzene	-38.0			200.0								
$C_6H_4N_2O_5$	2,4-Dinitrophenol	-232.7								-128.1			
$C_6H_4O_2$	*p*-Benzoquinone	-185.7			129.0					-122.9			
C_6H_5Br	Bromobenzene					60.9		219.2	154.3				
C_6H_5Cl	Chlorobenzene					11.1			150.1	52.0			
C_6H_5ClO	2-Chlorophenol								188.7				
C_6H_5ClO	3-Chlorophenol	-206.4				-189.3							
C_6H_5ClO	4-Chlorophenol	-197.7				-181.3							
$C_6H_5Cl_2N$	3,4-Dichloroaniline	-89.1											
C_6H_5F	Fluorobenzene					-150.6		205.9	146.4	-115.9			
C_6H_5I	Iodobenzene					117.2		205.4	158.7	164.9			
$C_6H_5NO_2$	Nitrobenzene					12.5			185.8	68.5		348.8	120.4
$C_6H_5NO_2$	3-Pyridinecarboxylic acid	-344.9								-221.5			
$C_6H_5NO_3$	2-Nitrophenol	-202.4											
$C_6H_5N_3$	1*H*-Benzotriazole	236.5								335.5			
$C_6H_5N_3O_4$	2,3-Dinitroaniline	-11.7											
$C_6H_5N_3O_4$	2,4-Dinitroaniline	-67.8											
$C_6H_5N_3O_4$	2,5-Dinitroaniline	-44.3											
$C_6H_5N_3O_4$	2,6-Dinitroaniline	-50.6											
$C_6H_5N_3O_4$	3,5-Dinitroaniline	-38.9											
C_6H_6	1,5-Hexadiyne					384.2							
C_6H_6	Benzene					49.1	124.5	173.4	136.0	82.9	129.7	269.2	82.4
C_6H_6ClN	2-Chloroaniline					-4.6							
C_6H_6ClN	3-Chloroaniline					-20.3			198.7				
C_6H_6ClN	4-Chloroaniline	-33.3			147.3								
$C_6H_6N_2O_2$	2-Nitroaniline	-26.1			166.0	-9.4				63.8			
$C_6H_6N_2O_2$	3-Nitroaniline	-38.3			158.8	-14.4				58.4			
$C_6H_6N_2O_2$	4-Nitroaniline	-42.0			167.0	-20.7				58.8			
C_6H_6O	Phenol	-165.1		144.0	127.4					-96.4			
C_6H_6O	2-Vinylfuran					-10.3				27.8			
$C_6H_6O_2$	*p*-Hydroquinone	-364.5			136.0					-265.3			
$C_6H_6O_2$	Pyrocatechol	-354.1								-267.5			
$C_6H_6O_2$	Resorcinol	-368.0								-274.7			
$C_6H_6O_3$	1,2,3-Benzenetriol	-551.1								-434.2			
$C_6H_6O_3$	1,2,4-Benzenetriol	-563.8								-444.0			
$C_6H_6O_3$	1,3,5-Benzenetriol	-584.6								-452.9			
$C_6H_6O_3$	3,4-Dimethyl-2,5-furandione	-581.4											
$C_6H_6O_6$	*cis*-1-Propene-1,2,3-tricarboxylic acid	-1224.4											
$C_6H_6O_6$	*trans*-1-Propene-1,2,3-tricarboxylic acid	-1232.7											
C_6H_6S	Benzenethiol					63.7		222.8	173.2	111.3			
C_6H_7N	Aniline					31.6			191.9	87.5	-7.0	317.9	107.9
C_6H_7N	2-Methylpyridine					56.7			158.6	99.2			
C_6H_7N	3-Methylpyridine					61.9		216.3	158.7	106.4			
C_6H_7N	4-Methylpyridine					59.2		209.1	159.0	103.8			
C_6H_7N	1-Cyclopentenecarbonitrile					111.5				156.5			
$C_6H_8N_2$	Adiponitrile					85.1			128.7	149.5			
$C_6H_8N_2$	1,2-Benzenediamine	-0.3											
$C_6H_8N_2$	1,3-Benzenediamine	-7.8		154.5	159.6								
$C_6H_8N_2$	1,4-Benzenediamine	3.0											
$C_6H_8N_2$	Phenylhydrazine					141.0			217.0	202.9			
$C_6H_8N_2S$	Bis(2-cyanoethyl) sulfide					96.3							
$C_6H_8O_4$	Dimethyl maleate								263.2				
$C_6H_8O_6$	*L*-Ascorbic acid	-1164.6											
$C_6H_8O_7$	Citric acid	-1543.8											
$C_6H_9Cl_3O_2$	Butyl trichloroacetate					-545.8				-492.3			
$C_6H_9Cl_3O_2$	Isobutyl trichloroacetate					-553.4				-500.2			
C_6H_9N	Cyclopentanecarbonitrile					0.7				44.1			
C_6H_9N	2,4-Dimethylpyrrole	-422.3											
C_6H_9N	2,5-Dimethylpyrrole					-16.7				39.8			
$C_6H_9NO_3$	Triacetamide					-610.5				-550.1			
$C_6H_9NO_6$	Nitrilotriacetic acid	-1311.9											
$C_6H_9N_3O_2$	*L*-Histidine	-466.7											

Molecular formula	Name	Crystal				Liquid				Gas			
		$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
C_6H_{10}	1,5-Hexadiene					54.1				84.2			
C_6H_{10}	3,3-Dimethyl-1-butyne					78.4							
C_6H_{10}	Cyclohexene					-38.5		214.6	148.3	-5.0			
C_6H_{10}	1-Methylcyclopentene					-36.4				-3.8			
C_6H_{10}	3-Methylcyclopentene					-23.7				7.4			
C_6H_{10}	4-Methylcyclopentene					-17.6				14.6			
$C_6H_{10}Cl_2O_2$	Butyl dichloroacetate					-550.1				-497.8			
$C_6H_{10}O$	Cyclohexanone					-271.2			182.2	-226.1			
$C_6H_{10}O$	2-Methylcyclopentanone					-265.2							
$C_6H_{10}O$	Mesityl oxide								212.5				
$C_6H_{10}O_2$	Ethyl *trans*-2-butenoate					-420.0				-375.6			
$C_6H_{10}O_2$	Methyl cyclobutanecarboxylate					-395.0				-350.2			
$C_6H_{10}O_3$	Ethyl acetoacetate								248.0				
$C_6H_{10}O_3$	Propanoic anhydride					-679.1				-626.5			
$C_6H_{10}O_4$	Adipic acid	-994.3											
$C_6H_{10}O_4$	Diethyl oxalate					-805.5				-742.0			
$C_6H_{10}O_4$	Ethylene glycol diacetate								310.0				
$C_6H_{11}Cl$	Chlorocyclohexane					-207.2				-163.7			
$C_6H_{11}ClO_2$	Ethyl 4-chlorobutanoate					-566.5				-513.8			
$C_6H_{11}ClO_2$	Propyl 3-chloropropanoate					-537.6				-485.7			
$C_6H_{11}ClO_2$	Butyl chloroacetate					-538.4				-487.4			
$C_6H_{11}NO$	Caprolactam	-329.4			156.8					-239.6			
$C_6H_{11}NO$	1-Methyl-2-piperidinone					-293.0							
C_6H_{12}	1-Hexene					-74.2		295.2	183.3	-43.5			
C_6H_{12}	*cis*-2-Hexene					-83.9				-52.3			
C_6H_{12}	*trans*-2-Hexene					-85.5				-53.9			
C_6H_{12}	*cis*-3-Hexene					-78.9				-47.6			
C_6H_{12}	*trans*-3-Hexene					-86.1				-54.4			
C_6H_{12}	2-Methyl-1-pentene					-90.0				-59.4			
C_6H_{12}	3-Methyl-1-pentene					-78.2				-49.5			
C_6H_{12}	4-Methyl-1-pentene					-80.0				-51.3			
C_6H_{12}	2-Methyl-2-pentene					-98.5				-66.9			
C_6H_{12}	3-Methyl-*cis*-2-pentene					-94.5				-62.3			
C_6H_{12}	3-Methyl-*trans*-2-pentene					-94.6				-63.1			
C_6H_{12}	4-Methyl-*cis*-2-pentene					-87.0				-57.5			
C_6H_{12}	4-Methyl-*trans*-2-pentene					-91.6				-61.5			
C_6H_{12}	2-Ethyl-1-butene					-87.1				-56.0			
C_6H_{12}	2,3-Dimethyl-1-butene					-93.2				-62.4			
C_6H_{12}	3,3-Dimethyl-1-butene					-87.5				-60.3			
C_6H_{12}	2,3-Dimethyl-2-butene					-101.4		270.2	174.7	-68.1			
C_6H_{12}	Cyclohexane					-156.4			154.9	-123.4			
C_6H_{12}	Methylcyclopentane					-137.9				-106.2			
C_6H_{12}	Ethylcyclobutane					-59.0				-27.5			
C_6H_{12}	1,1,2-Trimethylcyclopropane					-96.2							
$C_6H_{12}N_2O_4S_2$	*L*-Cystine	-1032.7											
$C_6H_{12}N_2S_4$	Thiram	40.2			301.7								
$C_6H_{12}O$	Butyl vinyl ether					-218.8			232.0	-182.6			
$C_6H_{12}O$	Hexanal							280.3	210.4				
$C_6H_{12}O$	2-Hexanone					-322.0			213.3	-278.9			
$C_6H_{12}O$	3-Hexanone					-320.2		305.3	216.9	-277.6			
$C_6H_{12}O$	4-Methyl-2-pentanone								213.3				
$C_6H_{12}O$	2-Methyl-3-pentanone					-325.9				-286.0			
$C_6H_{12}O$	3,3-Dimethyl-2-butanone					-328.6				-290.6			
$C_6H_{12}O$	Cyclohexanol					-348.2			208.2	-286.2			
$C_6H_{12}O$	*cis*-2-Methylcyclopentanol					-345.5							
$C_6H_{12}O_2$	Hexanoic acid					-583.8				-511.9			
$C_6H_{12}O_2$	Butyl acetate					-529.2			227.8	-485.3			
$C_6H_{12}O_2$	*tert*-Butyl acetate					-554.5			231.0	-516.5			
$C_6H_{12}O_2$	Isobutyl acetate								233.8				
$C_6H_{12}O_2$	Ethyl butanoate								228.0				
$C_6H_{12}O_2$	Methyl pentanoate					-514.2			229.3	-471.1			
$C_6H_{12}O_2$	Methyl 2,2-dimethylpropanoate					-530.0			257.9	-491.2			
$C_6H_{12}O_2$	Diacetone alcohol								221.3				
$C_6H_{12}O_3$	Ethylene glycol monoethyl ether acetate								376.0				
$C_6H_{12}O_3$	Paraldehyde					-673.1				-631.7			

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_6H_{12}O_6$	β-*D*-Fructose	-1265.6											
$C_6H_{12}O_6$	*D*-Galactose	-1286.3											
$C_6H_{12}O_6$	α-*D*-Glucose	-1273.3											
$C_6H_{12}O_6$	*D*-Mannose	-1263.0											
$C_6H_{12}O_6$	*L*-Sorbose	-1271.5											
$C_6H_{12}S$	Thiepane									-65.8	79.4	363.5	131.3
$C_6H_{12}S$	Cyclohexanethiol					-140.7		255.6	192.6	-96.2			
$C_6H_{12}S$	Cyclopentyl methyl sulfide					-109.8				-64.7			
$C_6H_{13}Br$	1-Bromohexane					-194.2		453.0	204.0	-148.3			
$C_6H_{13}Cl$	2-Chlorohexane					-246.1				-204.3			
$C_6H_{13}N$	Cyclohexylamine					-147.6				-104.0			
$C_6H_{13}N$	2-Methylpiperidine, (±)					-124.9				-84.4			
$C_6H_{13}NO$	Hexanamide	-423.0								-324.2			
$C_6H_{13}NO$	*N*-Butylacetamide					-380.9				-305.9			
$C_6H_{13}NO_2$	*DL*-Leucine	-640.6											
$C_6H_{13}NO_2$	*D*-Leucine	-637.3											
$C_6H_{13}NO_2$	*L*-Leucine	-637.4			200.1					-486.8			
$C_6H_{13}NO_2$	*DL*-Isoleucine	-635.3											
$C_6H_{13}NO_2$	*L*-Isoleucine	-637.8											
$C_6H_{13}NO_2$	*L*-Norleucine	-639.1											
$C_6H_{13}NO_2$	6-Aminohexanoic acid	-637.3											
C_6H_{14}	Hexane					-198.7			195.6	-166.9			
C_6H_{14}	2-Methylpentane					-204.6		290.6	193.7	-174.6			
C_6H_{14}	3-Methylpentane					-202.4		292.5	190.7	-171.9			
C_6H_{14}	2,2-Dimethylbutane					-213.8		272.5	191.9	-185.9			
C_6H_{14}	2,3-Dimethylbutane					-207.4		287.8	189.7	-178.1			
$C_6H_{14}N_2$	Azopropane					11.5				51.3			
$C_6H_{14}N_2O_2$	*DL*-Lysine	-678.7											
$C_6H_{14}N_4O_2$	*D*-Arginine	-623.5		250.6	232.0								
$C_6H_{14}O$	1-Hexanol					-377.5		287.4	240.4	-315.9			
$C_6H_{14}O$	2-Hexanol					-392.0				-333.5			
$C_6H_{14}O$	3-Hexanol					-392.4			286.2				
$C_6H_{14}O$	2-Methyl-1-pentanol								248.0				
$C_6H_{14}O$	3-Methyl-2-pentanol								275.9				
$C_6H_{14}O$	4-Methyl-2-pentanol					-394.7			273.0				
$C_6H_{14}O$	2-Methyl-3-pentanol					-396.4							
$C_6H_{14}O$	3-Methyl-3-pentanol								293.4				
$C_6H_{14}O$	Dipropyl ether					-328.8		323.9	221.6	-293.0			
$C_6H_{14}O$	Diisopropyl ether					-351.5			216.8	-319.2			
$C_6H_{14}O$	Butyl ethyl ether								159.0				
$C_6H_{14}O$	*tert*-Butyl ethyl ether									-313.9			
$C_6H_{14}OS$	Dipropyl sulfoxide					-329.4				-254.9			
$C_6H_{14}O_2$	1,2-Hexanediol					-577.1				-490.1			
$C_6H_{14}O_2$	1,6-Hexanediol	-569.9				-548.6				-461.2			
$C_6H_{14}O_2$	2-Methyl-2,4-pentanediol								336.0				
$C_6H_{14}O_2$	Ethylene glycol monobutyl ether								281.0				
$C_6H_{14}O_2$	1,1-Diethoxyethane					-491.4				-453.5			
$C_6H_{14}O_2$	Ethylene glycol diethyl ether					-451.4			259.4	-408.1			
$C_6H_{14}O_3$	Diethylene glycol monoethyl ether								301.0				
$C_6H_{14}O_3$	Diethylene glycol dimethyl ether								274.1				
$C_6H_{14}O_3$	Trimethylolpropane	-750.9											
$C_6H_{14}O_4$	Triethylene glycol					-804.3				-725.0			
$C_6H_{14}O_4S$	Dipropyl sulfate					-859.0				-792.0			
$C_6H_{14}O_6$	Galactitol					-1317.0							
$C_6H_{14}O_6$	*D*-Mannitol					-1314.5							
$C_6H_{14}S$	1-Hexanethiol					-175.7				-129.9			
$C_6H_{14}S$	2-Methyl-2-pentanethiol					-188.3				-148.3			
$C_6H_{14}S$	2,3-Dimethyl-2-butanethiol					-187.1				-147.9			
$C_6H_{14}S$	Diisopropyl sulfide					-181.6		313.0	232.0	-142.0			
$C_6H_{14}S$	Butyl ethyl sulfide					-172.3				-127.8			
$C_6H_{14}S$	Methyl pentyl sulfide					-167.1				-121.8			
$C_6H_{14}S_2$	Dipropyl disulfide					-171.5				-118.3			
$C_6H_{15}B$	Triethylborane					-194.6	9.4	336.7	241.2	-157.7	16.1	437.8	
$C_6H_{15}N$	Dipropylamine					-156.1				-116.0			
$C_6H_{15}N$	Diisopropylamine					-178.5				-143.8			
$C_6H_{15}N$	Triethylamine					-127.7			219.9	-92.7			

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_6H_{15}NO$	2-Diethylaminoethanol					-305.9							
$C_6H_{15}NO_3$	Triethanolamine	-664.2			389.0					-558.3			
$C_6H_{16}N_2$	1,6-Hexanediamine	-205.0											
$C_6H_{18}N_3OP$	Hexamethylphosphoric triamide								321.0				
$C_6H_{18}OSi_2$	Hexamethyldisiloxane					-815.0	-541.5	433.8	311.4	-777.7	-534.5	535.0	238.5
C_6MoO_6	Molybdenum hexacarbonyl	-982.8	-877.7	325.9	242.3					-912.1	-856.0	490.0	205.0
C_6N_4	Tetracyanoethene	623.8								705.0			
C_7F_8	Perfluorotoluene					-1311.1		355.5	262.3				
C_7F_{14}	Perfluoromethylcyclohexane					-2931.1			353.1	-2897.2			
C_7F_{16}	Perfluoroheptane					-3420.0		561.8	419.0	-3383.6			
$C_7H_3F_5$	2,3,4,5,6-Pentafluorotoluene					-883.8		306.4	225.8	-842.7			
$C_7H_4Cl_2O$	3-Chlorobenzoyl chloride					-189.7							
$C_7H_4N_2O_6$	3,5-Dinitrobenzoic acid	-409.8											
C_7H_5ClO	Benzoyl chloride					-158.0				-103.2			
$C_7H_5ClO_2$	2-Chlorobenzoic acid	-404.5								-325.0			
$C_7H_5ClO_2$	3-Chlorobenzoic acid	-424.3								-342.3			
$C_7H_5ClO_2$	4-Chlorobenzoic acid	-428.9			163.2					-341.0			
$C_7H_5F_3$	(Trifluoromethyl)benzene								188.4				
C_7H_5N	Benzonitrile					163.2		209.1	165.2	215.7			
C_7H_5NO	Benzoxazole	-24.2								44.8			
$C_7H_5NO_4$	2-Nitrobenzoic acid	-378.8											
$C_7H_5NO_4$	3-Nitrobenzoic acid	-394.7											
$C_7H_5NO_4$	4-Nitrobenzoic acid	-392.2											
$C_7H_5N_3O_6$	2,4,6-Trinitrotoluene	-63.2			243.3								
$C_7H_6N_2$	1*H*-Benzimidazole	79.5								181.7			
$C_7H_6N_2$	1*H*-Indazole	151.9								243.0			
$C_7H_6N_2O_4$	1-Methyl-2,4-dinitrobenzene	-66.4								33.2			
C_7H_6O	Benzaldehyde					-87.0		221.2	172.0	-36.7			
$C_7H_6O_2$	Benzoic acid	-385.2		167.6	146.8					-294.0			
$C_7H_6O_2$	Salicylaldehyde								222.0				
$C_7H_6O_2$	3-(2-Furanyl)-2-propenal	-182.0								-105.9			
$C_7H_6O_3$	2-Hydroxybenzoic acid	-589.9								-494.8			
C_7H_7Br	4-Bromotoluene					12.0							
C_7H_7Cl	2-Chlorotoluene								166.8				
C_7H_7Cl	(Chloromethyl)benzene					-32.5				18.9			
C_7H_7F	4-Fluorotoluene					-186.9			171.2	-147.4			
C_7H_7NO	Benzamide	-202.6								-100.9			
$C_7H_7NO_2$	Aniline-2-carboxylic acid	-401.1								-296.0			
$C_7H_7NO_2$	Aniline-3-carboxylic acid	-417.3								-283.6			
$C_7H_7NO_2$	Aniline-4-carboxylic acid	-410.0			177.8					-296.7			
$C_7H_7NO_2$	2-Nitrotoluene					-9.7							
$C_7H_7NO_2$	3-Nitrotoluene					-31.5							
$C_7H_7NO_2$	4-Nitrotoluene	-48.1			172.3					31.0			
$C_7H_7NO_2$	(Nitromethyl)benzene					-22.8				30.7			
$C_7H_7NO_2$	Salicylaldoxime	-183.7											
C_7H_8	Toluene					12.4			157.3	50.5			
$C_7H_8N_2O$	Phenylurea	-218.6											
C_7H_8O	*o*-Cresol	-204.6		165.4	154.6					-128.6			
C_7H_8O	*m*-Cresol					-194.0		212.6	224.9	-132.3			
C_7H_8O	*p*-Cresol	-199.3		167.3	150.2					-125.4			
C_7H_8O	Benzyl alcohol					-160.7		216.7	217.9	-100.4			
C_7H_8O	Anisole					-114.8				-67.9			
C_7H_9N	Benzylamine					34.2			207.2	94.4			
C_7H_9N	2-Methylaniline					-6.3				56.4	167.6	351.0	130.2
C_7H_9N	3-Methylaniline					-8.1				54.6	165.4	352.5	125.5
C_7H_9N	4-Methylaniline	-23.5								55.3	167.7	347.0	126.2
C_7H_9N	*N*-Methylaniline								207.1				
C_7H_9N	1-Cyclohexenecarbonitrile					48.1				101.6			
C_7H_9N	2,3-Dimethylpyridine					19.4		243.7	189.5	67.1			
C_7H_9N	2,4-Dimethylpyridine					16.1		248.5	184.8	63.6			
C_7H_9N	2,5-Dimethylpyridine					18.7		248.8	184.7	66.5			
C_7H_9N	2,6-Dimethylpyridine					12.7		244.2	185.2	58.1			
C_7H_9N	3,4-Dimethylpyridine					18.3		240.7	191.8	68.8			
C_7H_9N	3,5-Dimethylpyridine					22.5		241.7	184.5	72.0			
$C_7H_{10}O_2$	Ethyl 2-pentynoate					-301.8				-250.3			
$C_7H_{10}O_2$	Methyl 2-hexynoate					-242.7							

Molecular formula	Name	Crystal				Liquid				Gas			
		$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_7H_{11}Cl_3O_2$	Isopentyl trichloroacetate					-580.9				-523.1			
$C_7H_{11}N$	Cyclohexanecarbonitrile					-47.2				4.8			
C_7H_{12}	Bicyclo[2.2.1]heptane	-95.1			151.0					-54.8			
C_7H_{12}	1-Methylbicyclo(3,1,0)hexane					-33.2				1.7			
C_7H_{12}	Methylenecyclohexane					-61.3				-25.2			
C_7H_{12}	Vinylcyclopentane					-34.8							
C_7H_{12}	1-Ethylcyclopentene					-53.3				-19.8			
$C_7H_{12}O$	2-Methylenecyclohexanol					-277.6							
$C_7H_{12}O_2$	Butyl acrylate					-422.6			251.0	-375.3			
$C_7H_{12}O_4$	Diethyl malonate								285.0				
$C_7H_{13}ClO_2$	Butyl 2-chloropropanoate					-571.7				-517.3			
$C_7H_{13}ClO_2$	Isobutyl 2-chloropropanoate					-603.1				-549.6			
$C_7H_{13}ClO_2$	Butyl 3-chloropropanoate					-557.9				-502.3			
$C_7H_{13}ClO_2$	Isobutyl 3-chloropropanoate					-572.6				-517.3			
$C_7H_{13}ClO_2$	Propyl 2-chlorobutanoate					-630.7				-578.4			
$C_7H_{13}N$	Heptanenitrile					-82.8				-31.0			
C_7H_{14}	1-Heptene					-97.9		327.6	211.8	-62.3			
C_7H_{14}	*cis*-2-Heptene					-105.1							
C_7H_{14}	*trans*-2-Heptene					-109.5							
C_7H_{14}	*cis*-3-Heptene					-104.3							
C_7H_{14}	*trans*-3-Heptene					-109.3							
C_7H_{14}	5-Methyl-1-hexene					-100.0				-65.7			
C_7H_{14}	*cis*-3-Methyl-3-hexene					-115.9				-79.4			
C_7H_{14}	*trans*-3-Methyl-3-hexene					-112.7				-76.8			
C_7H_{14}	2,4-Dimethyl-1-pentene					-117.0				-83.8			
C_7H_{14}	4,4-Dimethyl-1-pentene					-110.6				-81.6			
C_7H_{14}	2,4-Dimethyl-2-pentene					-123.1				-88.7			
C_7H_{14}	*cis*-4,4-Dimethyl-2-pentene					-105.3				-72.6			
C_7H_{14}	*trans*-4,4-Dimethyl-2-pentene					-121.7				-88.8			
C_7H_{14}	2-Ethyl-3-methyl-1-butene					-114.1				-79.5			
C_7H_{14}	2,3,3-Trimethyl-1-butene					-117.7				-85.5			
C_7H_{14}	Cycloheptane					-156.6				-118.1			
C_7H_{14}	Methylcyclohexane					-190.1			184.8	-154.7			
C_7H_{14}	Ethylcyclopentane					-163.4		279.9		-126.9			
C_7H_{14}	1,1-Dimethylcyclopentane					-172.1				-138.2			
C_7H_{14}	*cis*-1,2-Dimethylcyclopentane					-165.3		269.2		-129.5			
C_7H_{14}	*trans*-1,2-Dimethylcyclopentane					-171.2				-136.6			
C_7H_{14}	*cis*-1,3-Dimethylcyclopentane					-170.1				-135.8			
C_7H_{14}	*trans*-1,3-Dimethylcyclopentane					-168.1				-133.6			
C_7H_{14}	1,1,2,2-Tetramethylcyclopropane					-119.8							
$C_7H_{14}Br_2$	1,2-Dibromoheptane					-212.3				-157.9			
$C_7H_{14}O$	1-Heptanal					-311.5		335.4	230.1	-263.8			
$C_7H_{14}O$	2-Heptanone								232.6				
$C_7H_{14}O$	3-Heptanone									-297.1			
$C_7H_{14}O$	4-Heptanone									-298.3			
$C_7H_{14}O$	2,2-Dimethyl-3-pentanone					-356.1				-313.6			
$C_7H_{14}O$	2,4-Dimethyl-3-pentanone					-352.9		318.0	233.7	-311.3			
$C_7H_{14}O$	*cis*-2-Methylcyclohexanol					-390.2				-327.0			
$C_7H_{14}O$	*trans*-2-Methylcyclohexanol, (±)					-415.7				-352.5			
$C_7H_{14}O$	*cis*-3-Methylcyclohexanol, (±)					-416.1				-350.9			
$C_7H_{14}O$	*trans*-3-Methylcyclohexanol, (±)					-394.4				-329.1			
$C_7H_{14}O$	*cis*-4-Methylcyclohexanol					-413.2				-347.5			
$C_7H_{14}O$	*trans*-4-Methylcyclohexanol					-433.3				-367.2			
$C_7H_{14}O_2$	Heptanoic acid					-610.2			265.4	-536.2			
$C_7H_{14}O_2$	Pentyl acetate								261.0				
$C_7H_{14}O_2$	Isopentyl acetate								248.5				
$C_7H_{14}O_2$	Ethyl pentanoate					-553.0				-505.9			
$C_7H_{14}O_2$	Ethyl 3-methylbutanoate					-571.0				-527.0			
$C_7H_{14}O_2$	Ethyl 2,2-dimethylpropanoate					-577.2				-536.0			
$C_7H_{14}O_2$	Methyl hexanoate					-540.2				-492.2			
$C_7H_{14}O_6$	α-Methylglucoside	-1233.3											
$C_7H_{15}Br$	1-Bromoheptane					-218.4				-167.8			
C_7H_{16}	Heptane					-224.2			224.7	-187.6			
C_7H_{16}	2-Methylhexane					-229.5		323.3	222.9	-194.5			
C_7H_{16}	3-Methylhexane					-226.4				-191.3			
C_7H_{16}	3-Ethylpentane					-224.9		314.5	219.6	-189.5			

Molecular formula	Name	Crystal $\Delta_f H°$ kJ/mol	Crystal $\Delta_f G°$ kJ/mol	Crystal $S°$ J/mol K	Crystal C_p J/mol K	Liquid $\Delta_f H°$ kJ/mol	Liquid $\Delta_f G°$ kJ/mol	Liquid $S°$ J/mol K	Liquid C_p J/mol K	Gas $\Delta_f H°$ kJ/mol	Gas $\Delta_f G°$ kJ/mol	Gas $S°$ J/mol K	Gas C_p J/mol K
C_7H_{16}	2,2-Dimethylpentane					-238.3		300.3	221.1	-205.7			
C_7H_{16}	2,3-Dimethylpentane					-233.1				-198.7			
C_7H_{16}	2,4-Dimethylpentane					-234.6		303.2	224.2	-201.6			
C_7H_{16}	3,3-Dimethylpentane					-234.2				-201.0			
C_7H_{16}	2,2,3-Trimethylbutane					-236.5		292.2	213.5	-204.4			
$C_7H_{16}O$	1-Heptanol					-403.3			272.1	-336.5			
$C_7H_{16}O$	*tert*-Butyl isopropyl ether					-392.8				-358.1			
$C_7H_{16}O_2$	1,7-Heptanediol					-574.2							
$C_7H_{16}O_2$	2,2-Diethoxypropane					-538.9				-506.9			
$C_7H_{16}S$	1-Heptanethiol					-200.5				-149.9			
$C_8H_4O_3$	Phthalic anhydride	-460.1		180.0	160.0					-371.4			
$C_8H_5NO_2$	1*H*-Indole-2,3-dione	-268.2											
$C_8H_6O_4$	Phthalic acid	-782.0		207.9	188.1								
$C_8H_6O_4$	Isophthalic acid	-803.0								-696.3			
$C_8H_6O_4$	Terephthalic acid	-816.1								-717.9			
C_8H_6S	Benzo[b]thiophene	100.6								166.3			
C_8H_7N	1*H*-Indole	86.6								156.5			
C_8H_8	Styrene					103.8			182.0	147.9			
C_8H_8O	Phenyl vinyl ether					-26.2				22.7			
C_8H_8O	Acetophenone					-142.5				-86.7			
$C_8H_8O_2$	*o*-Toluic acid	-416.5			174.9								
$C_8H_8O_2$	*m*-Toluic acid	-426.1			163.6								
$C_8H_8O_2$	*p*-Toluic acid	-429.2			169.0								
$C_8H_8O_2$	Methyl benzoate					-343.5			221.3	-287.9			
$C_8H_8O_3$	Methyl salicylate								249.0				
C_8H_9NO	Acetanilide	-209.4			179.3								
C_8H_{10}	1,7-Octadiyne					334.4							
C_8H_{10}	Ethylbenzene					-12.3			183.2	29.9			
C_8H_{10}	*o*-Xylene					-24.4			186.1	19.1			
C_8H_{10}	*m*-Xylene					-25.4			183.0	17.3			
C_8H_{10}	*p*-Xylene					-24.4			181.5	18.0			
$C_8H_{10}O$	2-Ethylphenol					-208.8				-145.2			
$C_8H_{10}O$	3-Ethylphenol					-214.3				-146.1			
$C_8H_{10}O$	4-Ethylphenol	-224.4			206.9					-144.1			
$C_8H_{10}O$	2,3-Xylenol	-241.1								-157.2			
$C_8H_{10}O$	2,4-Xylenol					-228.7				-163.8			
$C_8H_{10}O$	2,5-Xylenol	-246.6								-161.6			
$C_8H_{10}O$	2,6-Xylenol	-237.4								-162.1			
$C_8H_{10}O$	3,4-Xylenol	-242.3								-157.3			
$C_8H_{10}O$	3,5-Xylenol	-244.4								-162.4			
$C_8H_{10}O$	Benzeneethanol								252.6				
$C_8H_{10}O$	Ethoxybenzene					-152.6			228.5	-101.6			
$C_8H_{10}O_2$	1,2-Dimethoxybenzene					-290.3				-223.3			
$C_8H_{11}N$	*N*-Ethylaniline					8.2				56.3			
$C_8H_{11}N$	*N,N*-Dimethylaniline					46.0				100.5			
$C_8H_{11}N$	2,4-Dimethylaniline					-39.2							
$C_8H_{11}N$	2,5-Dimethylaniline					-38.9							
$C_8H_{11}N$	2,6-Dimethylaniline								238.9				
C_8H_{12}	1-Octen-3-yne					140.7							
C_8H_{12}	*cis*-1,2-Divinylcyclobutane					124.3				166.5			
C_8H_{12}	*trans*-1,2-Divinylcyclobutane					101.3				143.5			
$C_8H_{12}N_4$	2,2'-Azobis[isobutyronitrile]	246.0			237.6								
$C_8H_{12}O_2$	2,2,4,4-Tetramethyl-1,3-cyclobutanedione	-379.9								-307.6			
C_8H_{14}	Ethylidenecyclohexane					-103.5				-59.5			
C_8H_{14}	Allylcyclopentane					-64.5				-24.1			
$C_8H_{14}ClN_5$	Atrazine	-125.4											
$C_8H_{14}O_3$	Butanoic anhydride								283.7				
$C_8H_{15}ClO_2$	3-Methylbutyl 2-chloropropanoate					-627.3				-575.0			
$C_8H_{15}ClO_2$	3-Methylbutyl 3-chloropropanoate					-593.4				-539.4			
$C_8H_{15}N$	Octanenitrile					-107.3				-50.5			
C_8H_{16}	1-Octene					-124.5			241.0	-81.3			
C_8H_{16}	*cis*-2-Octene					-135.7			239.0				
C_8H_{16}	*trans*-2-Octene					-135.7			239.0				
C_8H_{16}	*cis*-2,2-Dimethyl-3-hexene					-126.4				-89.3			
C_8H_{16}	*trans*-2,2-Dimethyl-3-hexene					-144.9				-107.7			

Molecular formula	Name	Crystal $\Delta_f H°$ kJ/mol	Crystal $\Delta_f G°$ kJ/mol	Crystal $S°$ J/mol K	Crystal C_p J/mol K	Liquid $\Delta_f H°$ kJ/mol	Liquid $\Delta_f G°$ kJ/mol	Liquid $S°$ J/mol K	Liquid C_p J/mol K	Gas $\Delta_f H°$ kJ/mol	Gas $\Delta_f G°$ kJ/mol	Gas $S°$ J/mol K	Gas C_p J/mol K
C_8H_{16}	3-Ethyl-2-methyl-1-pentene					-137.9				-100.3			
C_8H_{16}	2,4,4-Trimethyl-1-pentene					-145.9				-110.5			
C_8H_{16}	2,4,4-Trimethyl-2-pentene					-142.4				-104.9			
C_8H_{16}	Cyclooctane					-167.7				-124.4			
C_8H_{16}	Ethylcyclohexane					-212.1		280.9	211.8	-171.5			
C_8H_{16}	1,1-Dimethylcyclohexane					-218.7		267.2	209.2	-180.9			
C_8H_{16}	*cis*-1,2-Dimethylcyclohexane					-211.8		274.1	210.2	-172.1			
C_8H_{16}	*trans*-1,2-Dimethylcyclohexane					-218.2		273.2	209.4	-179.9			
C_8H_{16}	*cis*-1,3-Dimethylcyclohexane					-222.9		272.6	209.4	-184.6			
C_8H_{16}	*trans*-1,3-Dimethylcyclohexane					-215.7		276.3	212.8	-176.5			
C_8H_{16}	*cis*-1,4-Dimethylcyclohexane					-215.6		271.1	212.1	-176.6			
C_8H_{16}	*trans*-1,4-Dimethylcyclohexane					-222.4		268.0	210.2	-184.5			
C_8H_{16}	Propylcyclopentane					-188.8		310.8	216.3	-147.7			
C_8H_{16}	1-Ethyl-1-methylcyclopentane					-193.8							
C_8H_{16}	*cis*-1-Ethyl-2-methylcyclopentane					-190.8							
C_8H_{16}	*trans*-1-Ethyl-2-methylcyclopentane					-195.1				-156.2			
C_8H_{16}	*cis*-1-Ethyl-3-methylcyclopentane					-194.4							
C_8H_{16}	*trans*-1-Ethyl-3-methylcyclopentane					-196.0							
$C_8H_{16}O$	Octanal									-291.9		365.4	
$C_8H_{16}O$	2-Ethylhexanal					-348.5				-299.6			
$C_8H_{16}O$	2-Octanone								273.3				
$C_8H_{16}O$	2,2,4-Trimethyl-3-pentanone					-381.6				-338.3			
$C_8H_{16}O_2$	Octanoic acid					-636.0			297.9	-554.3			
$C_8H_{16}O_2$	2-Ethylhexanoic acid					-635.1				-559.5			
$C_8H_{16}O_2$	Hexyl acetate								282.8				
$C_8H_{16}O_2$	Isobutyl isobutanoate					-587.4				-542.9			
$C_8H_{16}O_2$	Propyl pentanoate					-583.0				-533.6			
$C_8H_{16}O_2$	Isopropyl pentanoate					-592.2				-544.9			
$C_8H_{16}O_2$	Methyl heptanoate					-567.1			285.1	-515.5			
$C_8H_{17}Br$	1-Bromooctane					-245.1				-189.3			
$C_8H_{17}Cl$	1-Chlorooctane					-291.3				-238.9			
$C_8H_{17}NO$	Octanamide	-473.2								-362.7			
C_8H_{18}	Octane					-250.1			254.6	-208.5			
C_8H_{18}	2-Methylheptane					-255.0		356.4	252.0	-215.3			
C_8H_{18}	3-Methylheptane, (*S*)					-252.3		362.6	250.2	-212.5			
C_8H_{18}	4-Methylheptane					-251.6			251.1	-211.9			
C_8H_{18}	3-Ethylhexane					-250.4				-210.7			
C_8H_{18}	2,2-Dimethylhexane					-261.9				-224.5			
C_8H_{18}	2,3-Dimethylhexane					-252.6				-213.8			
C_8H_{18}	2,4-Dimethylhexane					-257.0				-219.2			
C_8H_{18}	2,5-Dimethylhexane					-260.4			249.2	-222.5			
C_8H_{18}	3,3-Dimethylhexane					-257.5			246.6	-219.9			
C_8H_{18}	3,4-Dimethylhexane					-251.8				-212.8			
C_8H_{18}	3-Ethyl-2-methylpentane					-249.6				-211.0			
C_8H_{18}	3-Ethyl-3-methylpentane					-252.8				-214.8			
C_8H_{18}	2,2,3-Trimethylpentane					-256.9				-220.0			
C_8H_{18}	2,2,4-Trimethylpentane					-259.2			239.1	-224.0			
C_8H_{18}	2,3,3-Trimethylpentane					-253.5			245.6	-216.3			
C_8H_{18}	2,3,4-Trimethylpentane					-255.0		329.3	247.3	-217.3			
C_8H_{18}	2,2,3,3-Tetramethylbutane	-269.0		273.7	239.2					-226.0			
$C_8H_{18}N_2$	Azobutane					-40.1				9.2			
$C_8H_{18}O$	1-Octanol					-426.5			305.2	-355.6			
$C_8H_{18}O$	2-Octanol								330.1				
$C_8H_{18}O$	2-Ethyl-1-hexanol					-432.8		347.0	317.5	-365.3			
$C_8H_{18}O$	Dibutyl ether					-377.9			278.2	-332.8			
$C_8H_{18}O$	Di-*sec*-butyl ether					-401.5				-360.6			
$C_8H_{18}O$	Di-*tert*-butyl ether					-399.6			276.1	-362.0			
$C_8H_{18}O$	*tert*-Butyl isobutyl ether					-409.1				-369.0			
$C_8H_{18}O_2$	1,8-Octanediol	-626.6											
$C_8H_{18}O_2$	2,5-Dimethyl-2,5-hexanediol	-681.7											
$C_8H_{18}O_3$	Diethylene glycol monobutyl ether								354.9				
$C_8H_{18}O_3$	Diethylene glycol diethyl ether								341.4				
$C_8H_{18}O_3S$	Dibutyl sulfite					-693.1				-625.3			
$C_8H_{18}O_5$	Tetraethylene glycol					-981.7			428.8	-883.0			
$C_8H_{18}S$	Dibutyl sulfide					-220.7		405.1	284.3	-167.7			
$C_8H_{18}S$	Di-*sec*-butyl sulfide					-220.7				-167.7			

Molecular formula	Name	Crystal				Liquid				Gas			
		$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_8H_{18}S$	Di-*tert*-butyl sulfide					-232.6				-188.8			
$C_8H_{18}S$	Diisobutyl sulfide					-229.2				-180.5			
$C_8H_{18}S_2$	Dibutyl disulfide					-222.9				-160.6			
$C_8H_{18}S_2$	Di-*tert*-butyl disulfide					-255.2				-201.0			
$C_8H_{19}N$	Dibutylamine					-206.0			292.9	-156.6			
$C_8H_{19}N$	Diisobutylamine					-218.5				-179.2			
$C_8H_{20}BrN$	Tetraethylammonium bromide	-342.7											
$C_8H_{20}O_4Si$	Ethyl silicate							533.1	364.4				
$C_8H_{20}Pb$	Tetraethyl lead					52.7		464.6	307.4	109.6			
$C_8H_{20}Si$	Tetraethylsilane								298.1				
$C_9H_6N_2O_2$	Toluene-2,4-diisocyanate								287.8				
C_9H_7N	Quinoline					141.2				200.5			
C_9H_7N	Isoquinoline					144.3		216.0	196.2	204.6			
C_9H_7NO	2-Quinolinol	-144.9								-25.5			
C_9H_7NO	8-Quinolinol	82.1											
C_9H_8	Indene					110.6		215.3	186.9	163.4			
$C_9H_8O_4$	2-(Acetyloxy)benzoic acid	-815.6											
C_9H_{10}	Cyclopropylbenzene					100.3				150.5			
C_9H_{10}	Indan					11.5		56.0	190.2	60.3			
$C_9H_{10}Cl_2N_2O$	Diuron	-329.0											
$C_9H_{10}N_2$	2,2'-Dipyrrolylmethane	126.2											
$C_9H_{10}O_2$	Ethyl benzoate								246.0				
$C_9H_{10}O_2$	Benzyl acetate								148.5				
$C_9H_{11}NO_2$	*L*-Phenylalanine	-466.9		213.6	203.0					-312.9			
$C_9H_{11}NO_3$	*L*-Tyrosine	-685.1		214.0	216.4								
C_9H_{12}	Propylbenzene					-38.3		287.8	214.7	7.9			
C_9H_{12}	Isopropylbenzene					-41.1			210.7	4.0			
C_9H_{12}	2-Ethyltoluene					-46.4				1.3			
C_9H_{12}	3-Ethyltoluene					-48.7				-1.8			
C_9H_{12}	4-Ethyltoluene					-49.8				-3.2			
C_9H_{12}	1,2,3-Trimethylbenzene					-58.5		267.9	216.4	-9.5			
C_9H_{12}	1,2,4-Trimethylbenzene					-61.8			215.0	-13.8			
C_9H_{12}	1,3,5-Trimethylbenzene					-63.4			209.3	-15.9			
$C_9H_{12}O$	2-Isopropylphenol					-233.7				-182.2			
$C_9H_{12}O$	3-Isopropylphenol					-252.5				-196.0			
$C_9H_{12}O$	4-Isopropylphenol	-270.0								-175.3			
$C_9H_{12}O_2$	Isopropylbenzene hydroperoxide					-148.3				-78.4			
$C_9H_{13}NO_2$	Ethyl 3,5-dimethylpyrrole-2-carboxylate	-474.5											
$C_9H_{13}NO_2$	Ethyl 2,4-dimethylpyrrole-3-carboxylate	-463.2											
$C_9H_{13}NO_2$	Ethyl 2,5-dimethylpyrrole-3-carboxylate	-478.7											
$C_9H_{13}NO_2$	Ethyl 4,5-dimethylpyrrole-3-carboxylate	-470.3											
$C_9H_{14}O$	Isophorone								253.5				
$C_9H_{14}O_6$	Triacetin					-1330.8		458.3	384.7	-1245.0			
$C_9H_{15}N$	3-Ethyl-2,4,5-trimethylpyrrole	-89.2											
C_9H_{16}	1-Nonyne					16.3				62.3			
$C_9H_{16}O_4$	Nonanedioic acid	-1054.3											
$C_9H_{17}NO$	2,2,6,6-Tetramethyl-4-piperidinone	-334.2								-273.4			
C_9H_{18}	Propylcyclohexane					-237.4		311.9	242.0	-192.3			
C_9H_{18}	1α,3α,5β-1,3,5-Trimethylcyclohexane									-212.1			
$C_9H_{18}O$	2-Nonanone					-397.2				-340.7			
$C_9H_{18}O$	5-Nonanone					-398.2		401.4	303.6	-344.9			
$C_9H_{18}O$	2,6-Dimethyl-4-heptanone					-408.5			297.3	-357.6			
$C_9H_{18}O_2$	Nonanoic acid					-659.7			362.4	-577.3			
$C_9H_{18}O_2$	Butyl pentanoate					-613.3				-560.2			
$C_9H_{18}O_2$	*sec*-Butyl pentanoate					-624.2				-573.2			
$C_9H_{18}O_2$	Isobutyl pentanoate					-620.0				-568.6			
$C_9H_{18}O_2$	Methyl octanoate					-590.3				-533.9			
$C_9H_{19}N$	*N*-Butylpiperidine					-171.8							
$C_9H_{19}N$	2,2,6,6-Tetramethylpiperidine					-206.9				-159.9			
C_9H_{20}	Nonane					-274.7			284.4	-228.2			
C_9H_{20}	2,2-Dimethylheptane					-288.1							
C_9H_{20}	2,2,3-Trimethylhexane					-282.7							

Molecular formula	Name	Crystal				Liquid				Gas			
		$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
C_9H_{20}	2,2,4-Trimethylhexane					-282.8							
C_9H_{20}	2,2,5-Trimethylhexane					-293.3							
C_9H_{20}	2,3,3-Trimethylhexane					-281.1							
C_9H_{20}	2,3,5-Trimethylhexane					-284.0				-242.6			
C_9H_{20}	2,4,4-Trimethylhexane					-280.2							
C_9H_{20}	3,3,4-Trimethylhexane					-277.5							
C_9H_{20}	3,3-Diethylpentane					-275.4			278.2	-233.3			
C_9H_{20}	3-Ethyl-2,2-dimethylpentane					-272.7							
C_9H_{20}	3-Ethyl-2,4-dimethylpentane					-269.7							
C_9H_{20}	2,2,3,3-Tetramethylpentane					-278.3			271.5	-237.1			
C_9H_{20}	2,2,3,4-Tetramethylpentane					-277.7				-236.9			
C_9H_{20}	2,2,4,4-Tetramethylpentane					-280.0			266.3	-241.6			
C_9H_{20}	2,3,3,4-Tetramethylpentane					-277.9				-236.1			
$C_9H_{20}N_2O$	Tetraethylurea					-380.0				-316.4			
$C_9H_{20}O$	1-Nonanol					-453.4				-376.5			
$C_9H_{20}O_2$	1,9-Nonanediol	-657.6											
$C_9H_{21}N$	Tripropylamine					-207.1				-161.0			
$C_{10}H_6N_2$	2-Quinolinecarbonitrile	246.5											
$C_{10}H_6N_2$	3-Quinolinecarbonitrile	242.3											
$C_{10}H_6N_2O_4$	1,5-Dinitronaphthalene	29.8											
$C_{10}H_6N_2O_4$	1,8-Dinitronaphthalene	39.7											
$C_{10}H_7Cl$	1-Chloronaphthalene					54.6			212.6	119.8			
$C_{10}H_7Cl$	2-Chloronaphthalene	55.4								137.4			
$C_{10}H_7I$	1-Iodonaphthalene					161.5				233.8			
$C_{10}H_7I$	2-Iodonaphthalene	144.3								235.1			
$C_{10}H_7NO_2$	1-Nitronaphthalene	42.6								111.2			
$C_{10}H_8$	Naphthalene	78.5	201.6	167.4	165.7					150.6	224.1	333.1	131.9
$C_{10}H_8$	Azulene	212.3								289.1			
$C_{10}H_8O$	1-Naphthol	-121.5			166.9					-30.4			149.4
$C_{10}H_8O$	2-Naphthol	-124.1		179.0	172.8					-29.9		366.6	147.8
$C_{10}H_9N$	1-Naphthylamine	67.8								132.8			
$C_{10}H_9N$	2-Naphthylamine	60.2								134.3			
$C_{10}H_{10}$	1,2-Dihydronaphthalene					71.6							
$C_{10}H_{10}$	1,4-Dihydronaphthalene					84.2							
$C_{10}H_{10}O$	1-Tetralone	-209.6											
$C_{10}H_{10}O_4$	Dimethyl phthalate								303.1				
$C_{10}H_{10}O_4$	Dimethyl isophthalate	-730.9											
$C_{10}H_{10}O_4$	Dimethyl terephthalate	-732.6			261.1								
$C_{10}H_{12}$	1,2,3,4-Tetrahydronaphthalene					-29.2			217.5	26.0			
$C_{10}H_{14}$	Butylbenzene					-63.2		321.2	243.4	-11.8			
$C_{10}H_{14}$	*sec*-Butylbenzene, (±)					-66.4				-18.4			
$C_{10}H_{14}$	*tert*-Butylbenzene					-71.9				-23.0			
$C_{10}H_{14}$	Isobutylbenzene					-69.8				-21.9			
$C_{10}H_{14}$	1-Isopropyl-2-methylbenzene					-73.3							
$C_{10}H_{14}$	1-Isopropyl-3-methylbenzene					-78.6							
$C_{10}H_{14}$	1-Isopropyl-4-methylbenzene					-78.0			236.4				
$C_{10}H_{14}$	*o*-Diethylbenzene					-68.5							
$C_{10}H_{14}$	*m*-Diethylbenzene					-73.5							
$C_{10}H_{14}$	*p*-Diethylbenzene					-72.8							
$C_{10}H_{14}$	3-Ethyl-1,2-dimethylbenzene					-80.5							
$C_{10}H_{14}$	4-Ethyl-1,2-dimethylbenzene					-86.0							
$C_{10}H_{14}$	2-Ethyl-1,3-dimethylbenzene					-80.1							
$C_{10}H_{14}$	2-Ethyl-1,4-dimethylbenzene					-84.8							
$C_{10}H_{14}$	1-Ethyl-2,4-dimethylbenzene					-84.1							
$C_{10}H_{14}$	1-Ethyl-3,5-dimethylbenzene					-87.8							
$C_{10}H_{14}$	1,2,4,5-Tetramethylbenzene	-119.9		245.6	215.1								
$C_{10}H_{14}O$	Thymol	-309.7								-218.5			
$C_{10}H_{16}$	Dipentene					-50.8			249.4	-2.6			
$C_{10}H_{16}$	*d*-Limonene					-54.5			249.0				
$C_{10}H_{16}$	α-Pinene					-16.4				28.3			
$C_{10}H_{16}$	β-Pinene					-7.7				38.7			
$C_{10}H_{16}$	α-Terpinene									-20.6			
$C_{10}H_{16}$	β-Myrcene					14.5							
$C_{10}H_{16}$	*cis*, *cis*-2,6-Dimethyl-2,4,6-octatriene					-24.0							
$C_{10}H_{16}N_2O_8$	Ethylenediaminetetraacetic acid	-1759.5											

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_{10}H_{16}O$	Camphor, (±)	-319.4			271.2					-267.5			
$C_{10}H_{18}$	1,1'-Bicyclopentyl					-178.9							
$C_{10}H_{18}$	*cis*-Decahydronaphthalene					-219.4		265.0	232.0	-169.2			
$C_{10}H_{18}$	*trans*-Decahydronaphthalene					-230.6		264.9	228.5	-182.1			
$C_{10}H_{18}O_4$	Sebacic acid	-1082.6								-921.9			
$C_{10}H_{19}N$	Decanenitrile					-158.4				-91.5			
$C_{10}H_{20}$	1-Decene					-173.8		425.0	300.8	-123.3			
$C_{10}H_{20}$	*cis*-1,2-Di-*tert*-butylethene					-163.6							
$C_{10}H_{20}$	Butylcyclohexane					-263.1		345.0	271.0	-213.7			
$C_{10}H_{20}O_2$	Decanoic acid	-713.7				-684.3				-594.9			
$C_{10}H_{20}O_2$	Methyl nonanoate					-616.2				-554.2			
$C_{10}H_{21}NO_2$	1-Nitrodecane					-351.5							
$C_{10}H_{22}$	Decane					-300.9			314.4	-249.5			
$C_{10}H_{22}$	2-Methylnonane					-309.8		420.1	313.3	-260.2			
$C_{10}H_{22}$	5-Methylnonane					-307.9		423.8	314.4	-258.6			
$C_{10}H_{22}O$	1-Decanol					-478.1			370.6	-396.6			
$C_{10}H_{22}O$	Dipentyl ether								250.0				
$C_{10}H_{22}O$	Diisopentyl ether								379.0				
$C_{10}H_{22}O_2$	1,10-Decanediol	-678.9											
$C_{10}H_{22}O_2$	Ethylene glycol dibutyl ether								350.0				
$C_{10}H_{22}S$	1-Decanethiol	-309.9				-276.5		476.1	350.4	-211.5			
$C_{10}H_{22}S$	Dipentyl sulfide					-266.4				-204.9			
$C_{10}H_{22}S$	Diisopentyl sulfide					-281.8				-221.5			
$C_{10}H_{23}N$	Octyldimethylamine					-232.8							
$C_{11}H_8O_2$	1-Naphthalenecarboxylic acid	-333.5								-223.1			
$C_{11}H_8O_2$	2-Naphthalenecarboxylic acid	-346.1								-232.5			
$C_{11}H_{10}$	1-Methylnaphthalene					56.3		254.8	224.4				
$C_{11}H_{10}$	2-Methylnaphthalene	44.9		220.0	196.0					106.7			
$C_{11}H_{12}N_2O_2$	*L*-Tryptophan	-415.3		251.0	238.1								
$C_{11}H_{14}$	1,1-Dimethylindan					-53.6				-1.6			
$C_{11}H_{16}$	1-*tert*-Butyl-3-methylbenzene					-109.7							
$C_{11}H_{16}$	1-*tert*-Butyl-4-methylbenzene					-109.7				-57.0			
$C_{11}H_{16}$	Pentamethylbenzene	-144.6								-67.2			
$C_{11}H_{20}$	Spiro[5.5]undecane					-244.5				-188.3			
$C_{11}H_{22}$	1-Undecene								344.9				
$C_{11}H_{22}O_2$	Methyl decanoate					-640.5				-573.8			
$C_{11}H_{24}$	Undecane					-327.2			344.9	-270.8			
$C_{11}H_{24}O$	1-Undecanol					-504.8							
$C_{12}F_{27}N$	Tris(perfluorobutyl)amine								418.4				
$C_{12}H_8$	Acenaphthylene	186.7			166.4					259.7			
$C_{12}H_8N_2$	Phenazine	237.0								328.8			
$C_{12}H_8O$	Dibenzofuran	-5.3								83.4			
$C_{12}H_8S$	Dibenzothiophene	120.0								205.1			
$C_{12}H_8S_2$	Thianthrene	182.0								286.0			
$C_{12}H_9N$	Carbazole	101.7								200.7			
$C_{12}H_{10}$	Acenaphthene	70.3		188.9	190.4					156.0			
$C_{12}H_{10}$	Biphenyl	99.4		209.4	198.4					181.4			
$C_{12}H_{10}N_2O$	*trans*-Azoxybenzene	243.4								342.0			
$C_{12}H_{10}N_2O$	*N*-Nitrosodiphenylamine	227.2											
$C_{12}H_{10}O$	Diphenyl ether	-32.1		233.9	216.6	-14.9				52.0			
$C_{12}H_{10}O_2$	1-Naphthaleneacetic acid	-359.2											
$C_{12}H_{10}O_2$	2-Naphthaleneacetic acid	-371.9											
$C_{12}H_{11}N$	Diphenylamine	130.2								219.3			
$C_{12}H_{11}N$	2-Aminobiphenyl	93.8								184.4			
$C_{12}H_{11}N$	4-Aminobiphenyl	81.0											
$C_{12}H_{12}N_2$	*p*-Benzidine	70.7											
$C_{12}H_{14}O_4$	Diethyl phthalate					-776.6		425.1	366.1	-688.4			
$C_{12}H_{16}$	Cyclohexylbenzene					-76.6				-16.7			
$C_{12}H_{17}NO_4$	Diethyl 3,5-dimethylpyrrole-2,4-dicarboxylate	-916.7											
$C_{12}H_{18}$	3,9-Dodecadiyne					197.8							
$C_{12}H_{18}$	5,7-Dodecadiyne					181.5							
$C_{12}H_{18}$	1-*tert*-Butyl-3,5-dimethylbenzene					-146.5							
$C_{12}H_{18}$	Hexamethylbenzene	-162.4		306.3	245.6					-77.4			
$C_{12}H_{22}$	Cyclohexylcyclohexane					-273.7				-215.7			
$C_{12}H_{22}O_4$	Dodecanedioic acid	-1130.0								-976.9			

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_{12}H_{22}O_{11}$	Sucrose	-2226.1											
$C_{12}H_{22}O_{11}$	β-*D*-Lactose	-2236.7											
$C_{12}H_{24}$	1-Dodecene					-226.2		484.8	360.7	-165.4			
$C_{12}H_{24}O_2$	Dodecanoic acid	-774.6			404.3	-737.9				-642.0			
$C_{12}H_{24}O_2$	Methyl undecanoate					-665.2				-593.8			
$C_{12}H_{24}O_{12}$	α-Lactose monohydrate	-2484.1											
$C_{12}H_{25}Br$	1-Bromododecane					-344.7				-269.9			
$C_{12}H_{25}Cl$	1-Chlorododecane					-392.3				-321.1			
$C_{12}H_{26}$	Dodecane					-350.9			375.8	-289.4			
$C_{12}H_{26}O$	1-Dodecanol					-528.5			438.1	-436.6			
$C_{12}H_{26}O_3$	Diethylene glycol dibutyl ether								452.0				
$C_{12}H_{27}N$	Tributylamine					-281.6							
$C_{12}H_{27}O_4P$	Tributyl phosphate								379.4				
$C_{13}H_8O_2$	Xanthone	-191.5											
$C_{13}H_9N$	Acridine	179.4								273.9			
$C_{13}H_9N$	Phenanthridine	141.9								240.5			
$C_{13}H_9N$	Benzo[f]quinoline	150.6								233.7			
$C_{13}H_{10}$	9*H*-Fluorene	89.9		207.3	203.1					175.0			173.1
$C_{13}H_{10}N_2$	9-Acridinamine	159.2											
$C_{13}H_{10}O$	Benzophenone	-34.5			224.8					54.9			
$C_{13}H_{11}N$	9-Methyl-9*H*-carbazole	105.5								201.0			
$C_{13}H_{12}$	Diphenylmethane	71.5		239.3		89.7				139.0			
$C_{13}H_{13}N$	*N*-Benzylaniline	101.4											
$C_{13}H_{14}N_2$	4,4'-Diaminodiphenylmethane				270.9								
$C_{13}H_{24}O_4$	Tridecanedioic acid	-1148.3											
$C_{13}H_{26}$	1-Tridecene								391.8				
$C_{13}H_{26}O_2$	Methyl dodecanoate					-693.0				-614.9			
$C_{13}H_{28}$	Tridecane								406.7				
$C_{13}H_{28}O$	1-Tridecanol	-599.4											
$C_{14}H_8O_2$	9,10-Anthracenedione	-188.5								-75.7			
$C_{14}H_8O_2$	9,10-Phenanthrenedione	-154.7								-46.6			
$C_{14}H_8O_4$	1,4-Dihydroxy-9,10-anthracenedione	-595.8								-471.7			
$C_{14}H_{10}$	Anthracene	129.2		207.5	210.5					230.9			
$C_{14}H_{10}$	Phenanthrene	116.2		215.1	220.6					207.5			
$C_{14}H_{10}$	Diphenylacetylene	312.4			225.9								
$C_{14}H_{10}O_2$	Benzil	-153.9								-55.5			
$C_{14}H_{10}O_4$	Benzoyl peroxide	-369.4								-281.7			
$C_{14}H_{12}$	*cis*-Stilbene					183.3				252.3			
$C_{14}H_{12}$	*trans*-Stilbene	136.9								236.1			
$C_{14}H_{14}$	1,1-Diphenylethane					48.7							
$C_{14}H_{14}$	1,2-Diphenylethane	51.5								142.9			
$C_{14}H_{22}$	1,3-Di-*tert*-butylbenzene					-188.8							
$C_{14}H_{22}$	1,4-Di-*tert*-butylbenzene	-212.0											
$C_{14}H_{23}N_3O_{10}$	Pentetic acid	-2225.2											
$C_{14}H_{27}N$	Tetradecanenitrile					-260.2				-174.9			
$C_{14}H_{28}O_2$	Tetradecanoic acid	-833.5			432.0	-788.8				-693.7			
$C_{14}H_{28}O_2$	Methyl tridecanoate					-717.9				-635.3			
$C_{14}H_{30}O$	1-Tetradecanol	-629.6			388.0	-580.6							
$C_{15}H_{16}O_2$	2,2-Bis(4-hydroxyphenyl)propane	-368.6											
$C_{15}H_{24}$	1,3-Di-*tert*-butyl-5-methylbenzene	-245.8											
$C_{15}H_{24}O$	2,6-Di-*tert*-butyl-4-methylphenol	-410.0								-296.9			
$C_{15}H_{30}$	Decylcyclopentane					-367.3							
$C_{15}H_{30}O_2$	Pentadecanoic acid	-861.7			443.3	-811.7				-699.0			
$C_{15}H_{30}O_2$	Methyl tetradecanoate					-743.9				-656.9			
$C_{15}H_{32}O$	1-Pentadecanol	-658.2											
$C_{16}H_{10}$	Fluoranthene	189.9		230.6	230.2					289.0			
$C_{16}H_{10}$	Pyrene	125.5		224.9	229.7					225.7			
$C_{16}H_{22}O_4$	Dibutyl phthalate					-842.6				-750.9			
$C_{16}H_{22}O_{11}$	α-*D*-Glucose pentaacetate	-2249.4											
$C_{16}H_{22}O_{11}$	β-*D*-Glucose pentaacetate	-2232.6											
$C_{16}H_{26}$	Decylbenzene					-218.3				-138.6			
$C_{16}H_{32}$	1-Hexadecene					-328.7		587.9	488.9	-248.4			
$C_{16}H_{32}O_2$	Hexadecanoic acid	-891.5		452.4	460.7	-838.1				-737.1			
$C_{16}H_{32}O_2$	Methyl pentadecanoate					-771.0				-680.0			
$C_{16}H_{33}Br$	1-Bromohexadecane					-444.5				-350.2			

		Crystal				Liquid				Gas			
Molecular formula	**Name**	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K	$\Delta_f H°$ kJ/mol	$\Delta_f G°$ kJ/mol	$S°$ J/mol K	C_p J/mol K
$C_{16}H_{34}$	Hexadecane					-456.1			501.6	-374.8			
$C_{16}H_{34}O$	1-Hexadecanol	-686.5			422.0					-517.0			
$C_{16}H_{36}IN$	Tetrabutylammonium iodide	-498.6											
$C_{17}H_{34}O_2$	Heptadecanoic acid	-924.4			475.7	-865.6							
$C_{18}H_{12}$	Benz[a]anthracene	170.8								293.0			
$C_{18}H_{12}$	Chrysene	145.3								269.8			
$C_{18}H_{14}$	*o*-Terphenyl			298.8	274.8			337.1	369.1				
$C_{18}H_{14}$	*p*-Terphenyl	163.0		285.6	278.7					279.0			
$C_{18}H_{15}N$	Triphenylamine	234.7								326.8			
$C_{18}H_{15}O_4P$	Triphenyl phosphate			397.5	356.2								
$C_{18}H_{15}P$	Triphenylphosphine				312.5								
$C_{18}H_{30}$	1,3,5-Tri-*tert*-butylbenzene	-320.0											
$C_{18}H_{34}O_2$	Oleic acid								577.0				
$C_{18}H_{34}O_4$	Dibutyl sebacate								619.0				
$C_{18}H_{36}O_2$	Stearic acid	-947.7			501.5	-884.7				-781.2			
$C_{18}H_{37}Cl$	1-Chlorooctadecane					-544.1				-446.0			
$C_{18}H_{38}$	Octadecane	-567.4		480.2	485.6					-414.6			
$C_{18}H_{39}N$	Trihexylamine					-433.0							
$C_{19}H_{16}O$	Triphenylmethanol	-2.5											
$C_{19}H_{36}O_2$	Methyl oleate					-734.5				-649.9			
$C_{19}H_{36}O_2$	Methyl *trans*-9-octadecenoate					-737.0							
$C_{20}H_{12}$	Perylene	182.8		264.6	274.9								
$C_{20}H_{12}$	Benzo[a]pyrene												254.8
$C_{20}H_{14}O_4$	Diphenyl phthalate	-489.2											
$C_{20}H_{38}O_2$	Ethyl oleate					-775.8							
$C_{20}H_{38}O_2$	Ethyl *trans*-9-octadecenoate					-773.3							
$C_{20}H_{40}O_2$	Eicosanoic acid	-1011.9			545.1	-940.0				-812.4			
$C_{21}H_{21}O_4P$	Tri-*o*-cresyl phosphate			570.0	578.0								
$C_{22}H_{14}$	Dibenz[a,h]anthracene												283.9
$C_{22}H_{42}O_2$	*trans*-13-Docosenoic acid	-960.7											
$C_{22}H_{42}O_2$	Butyl oleate					-816.9							
$C_{22}H_{44}O_2$	Butyl stearate												
$C_{24}H_{38}O_4$	Bis(2-ethylhexyl) phthalate								704.7				
$C_{24}H_{51}N$	Trioctylamine					-585.0							
$C_{26}H_{18}$	9,10-Diphenylanthracene	308.7								465.6			
$C_{26}H_{54}$	5-Butyldocosane					-713.5				-587.6			
$C_{26}H_{54}$	11-Butyldocosane					-716.0				-593.4			
$C_{28}H_{18}$	9,9'-Bianthracene	326.2								454.3			
$C_{31}H_{64}$	11-Decylheneicosane					-848.0				-705.8			
$C_{32}H_{66}$	Dotriacontane	-968.3								-697.2			
C_{60}	Carbon (fullerene-C_{60})	2327.0	2302.0	426.0	520.0					2502.0	2442.0	544.0	512.0
C_{70}	Carbon (fullerene-C_{70})	2555.0	2537.0	464.0	650.0					2755.0	2692.0	614.0	585.0