

Ethane, 1,1-difluoro-

Other names:	1,1-DIFLUOROETHANE Algofrene Type 67 CH3CHF2 Dymel 152 Dymel 152A ETHYLIDENE FLUORIDE Ethylidene difluoride FC 152a FREON 152A GENETRON 100 Genetron 152a HFC 152a Halocarbon 152A Propellant 152a R 152a R-152a REFRIGERANT-152A UN 1030
Inchi:	InChI=1S/C2H4F2/c1-2(3)4/h2H,1H3
InchiKey:	NPNPZTNLOVBDOC-UHFFFAOYSA-N
Formula:	C2H4F2
SMILES:	CC(F)F
Mol. weight [g/mol]:	66.05
CAS:	75-37-6

Physical Properties

Property code	Value	Unit	Source
af	0.2560		KDB
chg	-1220.00 ± 8.40	kJ/mol	NIST Webbook
dm	2.30	debye	KDB
gf	-436.50	kJ/mol	KDB
hf	-497.00 ± 4.00	kJ/mol	NIST Webbook
hf	-494.00	kJ/mol	KDB
hfus	3.57	kJ/mol	Joback Method
hvap	18.02	kJ/mol	Joback Method
ie	11.87 ± 0.03	eV	NIST Webbook
ie	12.80	eV	NIST Webbook

ie	12.68	eV	NIST Webbook
ie	11.86 ± 0.03	eV	NIST Webbook
ie	11.87 ± 0.03	eV	NIST Webbook
log10ws	-0.97		Crippen Method
logp	1.271		Crippen Method
mcvol	42.580	ml/mol	McGowan Method
pc	4519.80 ± 1.00	kPa	NIST Webbook
pc	4495.00 ± 10.00	kPa	NIST Webbook
pc	4515.70 ± 3.00	kPa	NIST Webbook
pc	4495.36 ± 103.42	kPa	NIST Webbook
pc	4500.00	kPa	KDB
pt	0.06 ± 0.01	kPa	NIST Webbook
pt	0.06 ± 0.01	kPa	NIST Webbook
rinpol	242.00		NIST Webbook
rinpol	326.00		NIST Webbook
rinpol	326.00		NIST Webbook
tb	248.50	K	NIST Webbook
tb	248.20	K	KDB
tb	248.45 ± 0.10	K	NIST Webbook
tb	248.40	K	NIST Webbook
tc	386.70	K	KDB
tf	156.00	K	KDB
tt	154.30	K	Solid-Liquid Equilibria for the CO2 + R152a and N2O + R152a Systems
tt	154.56 ± 0.01	K	NIST Webbook
tt	154.56 ± 0.01	K	NIST Webbook
vc	0.181	m3/kmol	KDB
zc	0.2533260		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	66.80	J/mol×K	290.46	Joback Method
cpg	74.08	J/mol×K	337.66	Joback Method
cpg	77.55	J/mol×K	361.26	Joback Method
cpg	80.92	J/mol×K	384.86	Joback Method
cpg	62.99	J/mol×K	266.86	Joback Method
cpg	59.07	J/mol×K	243.26	Joback Method
cpg	70.49	J/mol×K	314.06	Joback Method
cpl	118.40	J/mol×K	298.17	NIST Webbook
cpl	117.31	J/mol×K	300.00	NIST Webbook

hfust	1.57	kJ/mol	154.60	NIST Webbook
hvapt	20.40	kJ/mol	273.00	NIST Webbook
hvapt	21.80	kJ/mol	318.00	NIST Webbook
hvapt	21.80	kJ/mol	233.00	NIST Webbook
hvapt	12.90	kJ/mol	353.00	NIST Webbook
hvapt	23.30	kJ/mol	246.00	NIST Webbook
hvapt	17.80	kJ/mol	313.00	NIST Webbook
hvapt	22.10	kJ/mol	318.00	NIST Webbook
hvapt	22.70	kJ/mol	233.00	NIST Webbook
hvapt	21.34	kJ/mol	247.20	KDB
hvapt	23.80	kJ/mol	204.00	NIST Webbook
kvisc	0.0000002	m2/s	271.62	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	325.13	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	325.33	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	315.35	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	315.35	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	303.08	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	293.10	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	263.91	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000003	m2/s	253.46	Viscosity of saturated liquid dimethyl ether from (227 to 343) K

kvisc	0.0000003	m2/s	244.40	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	281.75	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
pvap	590.30	kPa	298.17	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	1505.00	kPa	333.15	Vapor liquid equilibria of the 1,1-difluoroethane (HFC-152a) + isobutene system
pvap	2109.00	kPa	348.15	Vapor liquid equilibria of the 1,1-difluoroethane (HFC-152a) + isobutene system
pvap	148.60	kPa	258.15	Phase equilibrium for the binary mixture of {1,1-difluoroethane (R152a) + trans-1,3,3,3-tetrafluoropropene (R1234ze (E))} at various temperatures from 258.150 to 288.150 K
pvap	219.40	kPa	268.15	Phase equilibrium for the binary mixture of {1,1-difluoroethane (R152a) + trans-1,3,3,3-tetrafluoropropene (R1234ze (E))} at various temperatures from 258.150 to 288.150 K

pvap	314.10	kPa	278.15	Phase equilibrium for the binary mixture of {1,1-difluoroethane (R152a) + trans-1,3,3,3-tetrafluoropropene (R1234ze (E))} at various temperatures from 258.150 to 288.150 K
pvap	437.80	kPa	288.15	Phase equilibrium for the binary mixture of {1,1-difluoroethane (R152a) + trans-1,3,3,3-tetrafluoropropene (R1234ze (E))} at various temperatures from 258.150 to 288.150 K
pvap	374.80	kPa	283.15	Isothermal VLE measurements for the binary mixture of 2,3,3,3-tetrafluoroprop-1-ene (HFO-1234yf) + 1,1-difluoroethane (HFC-152a)
pvap	515.20	kPa	293.15	Isothermal VLE measurements for the binary mixture of 2,3,3,3-tetrafluoroprop-1-ene (HFO-1234yf) + 1,1-difluoroethane (HFC-152a)
pvap	692.00	kPa	303.15	Isothermal VLE measurements for the binary mixture of 2,3,3,3-tetrafluoroprop-1-ene (HFO-1234yf) + 1,1-difluoroethane (HFC-152a)
pvap	911.10	kPa	313.15	Isothermal VLE measurements for the binary mixture of 2,3,3,3-tetrafluoroprop-1-ene (HFO-1234yf) + 1,1-difluoroethane (HFC-152a)
pvap	1179.40	kPa	323.15	Isothermal VLE measurements for the binary mixture of 2,3,3,3-tetrafluoroprop-1-ene (HFO-1234yf) + 1,1-difluoroethane (HFC-152a)

pvap	909.00	kPa	313.15	(Vapour + liquid) equilibria of the {1,1-difluoroethane (HFC-152a) + n-butane (HC-600)} system
pvap	1181.00	kPa	323.15	(Vapour + liquid) equilibria of the {1,1-difluoroethane (HFC-152a) + n-butane (HC-600)} system
pvap	1509.00	kPa	333.15	(Vapour + liquid) equilibria of the {1,1-difluoroethane (HFC-152a) + n-butane (HC-600)} system
pvap	1898.00	kPa	343.15	(Vapour + liquid) equilibria of the {1,1-difluoroethane (HFC-152a) + n-butane (HC-600)} system
pvap	2901.00	kPa	363.15	(Vapour + liquid) equilibria of the {1,1-difluoroethane (HFC-152a) + n-butane (HC-600)} system
pvap	115.20	kPa	253.68	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	142.20	kPa	258.44	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa

pvap	144.00	kPa	258.44	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	174.90	kPa	263.39	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	213.70	kPa	268.32	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	256.80	kPa	273.23	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	308.10	kPa	278.19	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa

pvap	311.70	kPa	278.25	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	368.50	kPa	283.31	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	432.90	kPa	288.27	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	506.80	kPa	293.23	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	1039.00	kPa	318.15	Vapor liquid equilibria of the 1,1-difluoroethane (HFC-152a) + isobutene system
pvap	604.40	kPa	298.84	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa

pvap	687.60	kPa	303.37	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	791.00	kPa	308.31	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	693.00	kPa	303.15	Vapor liquid equilibria of the 1,1-difluoroethane (HFC-152a) + isobutene system
pvap	904.50	kPa	313.19	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	1034.80	kPa	318.25	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	1175.40	kPa	323.26	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa

pvap	1185.50	kPa	323.30	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	1326.80	kPa	328.12	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	1502.30	kPa	333.31	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	1683.50	kPa	338.19	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	1879.60	kPa	343.10	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa

pvap	1891.70	kPa	343.20	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	2104.60	kPa	348.26	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa
pvap	148.60	kPa	258.15	(Vapour + liquid) equilibrium data for the azeotropic {1,1-difluoroethane (R152a) + 1,1,2,2-Tetrafluoroethane (R134)} system at various temperatures from (258.150 to 288.150) K
pvap	219.40	kPa	268.15	(Vapour + liquid) equilibrium data for the azeotropic {1,1-difluoroethane (R152a) + 1,1,2,2-Tetrafluoroethane (R134)} system at various temperatures from (258.150 to 288.150) K
pvap	314.10	kPa	278.15	(Vapour + liquid) equilibrium data for the azeotropic {1,1-difluoroethane (R152a) + 1,1,2,2-Tetrafluoroethane (R134)} system at various temperatures from (258.150 to 288.150) K

pvap	437.80	kPa	288.15	(Vapour + liquid) equilibrium data for the azeotropic {1,1-difluoroethane (R152a) + 1,1,2,2-Tetrafluoroethane (R134)} system at various temperatures from (258.150 to 288.150) K
pvap	148.90	kPa	258.15	Measurements of isothermal (vapor + liquid) phase equilibrium for {trifluoroiodomethane (R131l) + 1,1-difluoroethane (R152a)} from T = (258.150 to 283.150) K
pvap	181.70	kPa	263.15	Measurements of isothermal (vapor + liquid) phase equilibrium for {trifluoroiodomethane (R131l) + 1,1-difluoroethane (R152a)} from T = (258.150 to 283.150) K
pvap	264.10	kPa	273.15	Measurements of isothermal (vapor + liquid) phase equilibrium for {trifluoroiodomethane (R131l) + 1,1-difluoroethane (R152a)} from T = (258.150 to 283.150) K
pvap	372.80	kPa	283.15	Measurements of isothermal (vapor + liquid) phase equilibrium for {trifluoroiodomethane (R131l) + 1,1-difluoroethane (R152a)} from T = (258.150 to 283.150) K
pvap	1177.30	kPa	323.15	(Vapour + liquid) equilibrium data for the {1,1-difluoroethane (R152a) + 1,1,1,3,3-pentafluoropropane (R245fa)} system at temperatures from (323.150 to 353.150) K

pvap	1500.60	kPa	333.15	(Vapour + liquid) equilibrium data for the {1,1-difluoroethane (R152a) + 1,1,1,3,3-pentafluoropropane (R245fa)} system at temperatures from (323.150 to 353.150) K
pvap	1886.80	kPa	343.15	(Vapour + liquid) equilibrium data for the {1,1-difluoroethane (R152a) + 1,1,1,3,3-pentafluoropropane (R245fa)} system at temperatures from (323.150 to 353.150) K
pvap	2342.70	kPa	353.15	(Vapour + liquid) equilibrium data for the {1,1-difluoroethane (R152a) + 1,1,1,3,3-pentafluoropropane (R245fa)} system at temperatures from (323.150 to 353.150) K
pvap	373.40	kPa	283.15	Vapor-Liquid Equilibria for the Binary and Ternary Systems of Difluoromethane (R32), 1,1-Difluoroethane (R152a), and 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf)
pvap	439.30	kPa	288.16	Vapor-Liquid Equilibria for the Binary and Ternary Systems of Difluoromethane (R32), 1,1-Difluoroethane (R152a), and 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf)
pvap	513.50	kPa	293.15	Vapor-Liquid Equilibria for the Binary and Ternary Systems of Difluoromethane (R32), 1,1-Difluoroethane (R152a), and 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf)

pvap	596.90	kPa	298.15	Vapor-Liquid Equilibria for the Binary and Ternary Systems of Difluoromethane (R32), 1,1-Difluoroethane (R152a), and 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf)
pvap	690.10	kPa	303.14	Vapor-Liquid Equilibria for the Binary and Ternary Systems of Difluoromethane (R32), 1,1-Difluoroethane (R152a), and 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf)
pvap	794.10	kPa	308.14	Vapor-Liquid Equilibria for the Binary and Ternary Systems of Difluoromethane (R32), 1,1-Difluoroethane (R152a), and 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf)
pvap	909.80	kPa	313.15	Vapor-Liquid Equilibria for the Binary and Ternary Systems of Difluoromethane (R32), 1,1-Difluoroethane (R152a), and 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf)
pvap	1037.40	kPa	318.15	Vapor-Liquid Equilibria for the Binary and Ternary Systems of Difluoromethane (R32), 1,1-Difluoroethane (R152a), and 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf)

pvap	1178.20	kPa	323.17	Vapor-Liquid Equilibria for the Binary and Ternary Systems of Difluoromethane (R32), 1,1-Difluoroethane (R152a), and 2,3,3,3-Tetrafluoroprop-1-ene (R1234yf)
pvap	73.00	kPa	243.15	Speeds of Sound in Dense Liquid and Vapor Pressures for 1,1-Difluoroethane.
pvap	179.00	kPa	263.15	Speeds of Sound in Dense Liquid and Vapor Pressures for 1,1-Difluoroethane.
pvap	372.00	kPa	283.15	Speeds of Sound in Dense Liquid and Vapor Pressures for 1,1-Difluoroethane.
pvap	595.00	kPa	298.15	Speeds of Sound in Dense Liquid and Vapor Pressures for 1,1-Difluoroethane.
pvap	907.00	kPa	313.15	Speeds of Sound in Dense Liquid and Vapor Pressures for 1,1-Difluoroethane.
pvap	1499.00	kPa	333.15	Speeds of Sound in Dense Liquid and Vapor Pressures for 1,1-Difluoroethane.
pvap	265.80	kPa	273.15	Vapor-Liquid Equilibria for the 1,1-Difluoroethane (HFC-152a) + Propane (R-290) System
pvap	372.80	kPa	283.15	Vapor-Liquid Equilibria for the 1,1-Difluoroethane (HFC-152a) + Propane (R-290) System
pvap	442.00	kPa	288.15	Vapor liquid equilibria of the 1,1-difluoroethane (HFC-152a) + isobutene system

pvap	689.90	kPa	303.15	Vapor-Liquid Equilibria for the 1,1-Difluoroethane (HFC-152a) + Propane (R-290) System
pvap	909.40	kPa	313.15	Vapor-Liquid Equilibria for the 1,1-Difluoroethane (HFC-152a) + Propane (R-290) System
pvap	127.00	kPa	254.31	Isothermal Vapor-Liquid Equilibria for 1,1-Difluoroethane (R152a) + Propane (R290) at Temperatures between (254.31 and 287.94) K
pvap	156.00	kPa	259.27	Isothermal Vapor-Liquid Equilibria for 1,1-Difluoroethane (R152a) + Propane (R290) at Temperatures between (254.31 and 287.94) K
pvap	231.00	kPa	269.26	Isothermal Vapor-Liquid Equilibria for 1,1-Difluoroethane (R152a) + Propane (R290) at Temperatures between (254.31 and 287.94) K
pvap	331.00	kPa	279.47	Isothermal Vapor-Liquid Equilibria for 1,1-Difluoroethane (R152a) + Propane (R290) at Temperatures between (254.31 and 287.94) K
pvap	267.00	kPa	273.15	Vapor liquid equilibria of the 1,1-difluoroethane (HFC-152a) + isobutene system
pvap	1176.00	kPa	323.15	Vapor liquid equilibria for the binary system of 1,1-difluoroethane (HFC-152a) + n-butane (R-600) at various temperatures

pvap	909.00	kPa	313.15	Vapor liquid equilibria for the binary system of 1,1-difluoroethane (HFC-152a) + n-butane (R-600) at various temperatures
pvap	689.00	kPa	303.15	Vapor liquid equilibria for the binary system of 1,1-difluoroethane (HFC-152a) + n-butane (R-600) at various temperatures
pvap	512.00	kPa	293.15	Vapor liquid equilibria for the binary system of 1,1-difluoroethane (HFC-152a) + n-butane (R-600) at various temperatures
pvap	372.00	kPa	283.15	Vapor liquid equilibria for the binary system of 1,1-difluoroethane (HFC-152a) + n-butane (R-600) at various temperatures
pvap	264.00	kPa	273.15	Vapor liquid equilibria for the binary system of 1,1-difluoroethane (HFC-152a) + n-butane (R-600) at various temperatures
pvap	513.30	kPa	293.15	Vapor-Liquid Equilibria for the 1,1-Difluoroethane (HFC-152a) + Propane (R-290) System
pvap	812.50	kPa	308.37	(Vapor + liquid) equilibrium data for (carbon dioxide + 1,1-difluoroethane) system at temperatures from (258 to 343) K and pressures up to about 8 MPa

pvap	437.00	kPa	287.94	Isothermal Vapor-Liquid Equilibria for 1,1-Difluoroethane (R152a) + Propane (R290) at Temperatures between (254.31 and 287.94) K	
rhoI	1012.00	kg/m3	247.00	KDB	
srf	0.01	N/m	308.19	Surface tension of pentafluoroethane + 1,1-difluoroethane from (243 to 328)K	
srf	0.01	N/m	303.23	Surface tension of pentafluoroethane + 1,1-difluoroethane from (243 to 328)K	
srf	0.01	N/m	298.18	Surface tension of pentafluoroethane + 1,1-difluoroethane from (243 to 328)K	
srf	0.01	N/m	293.20	KDB	
srf	0.01	N/m	313.13	Surface tension of pentafluoroethane + 1,1-difluoroethane from (243 to 328)K	

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.44412e+01
Coeff. B	-2.15958e+03
Coeff. C	-2.82960e+01
Temperature range (K), min.	180.88
Temperature range (K), max.	386.41

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C \cdot \ln(T) + D \cdot T^2$
Coeff. A	7.01755e+01
Coeff. B	-4.44787e+03
Coeff. C	-8.80272e+00
Coeff. D	1.46275e-05
Temperature range (K), min.	156.15
Temperature range (K), max.	386.60

Datasets

Molar heat capacity at constant pressure, J/K/mol

Temperature, K - Liquid	Pressure, kPa - Liquid	Molar heat capacity at constant pressure, J/K/mol - Liquid
305.15	1490.00	121.00
305.15	2070.00	121.14
305.15	2540.00	120.81
305.15	2950.00	120.28
305.15	3440.00	119.29
305.15	4010.00	119.55
305.15	4600.00	118.96
305.15	5030.00	118.49
310.15	1490.00	121.80
310.15	2070.00	121.53
310.15	2540.00	121.07
310.15	2950.00	120.81
310.15	3440.00	120.08
310.15	4010.00	119.75
310.15	4600.00	119.35
310.15	5030.00	119.09
315.15	1490.00	123.84
315.15	2070.00	123.25
315.15	2540.00	122.79
315.15	2950.00	122.46
315.15	3440.00	121.80
315.15	4010.00	121.20
315.15	4600.00	120.61

315.15	5030.00	120.41
320.15	1490.00	126.16
320.15	2070.00	125.23
320.15	2540.00	124.77
320.15	2950.00	124.24
320.15	3440.00	123.71
320.15	4010.00	122.99
320.15	4600.00	122.06
320.15	5030.00	121.80
325.15	1490.00	129.00
325.15	2070.00	127.61
325.15	2540.00	127.01
325.15	2950.00	126.42
325.15	3440.00	125.89
325.15	4010.00	124.97
325.15	4600.00	123.84
325.15	5030.00	123.45
330.15	2070.00	130.65
330.15	2540.00	129.79
330.15	2950.00	129.13
330.15	3440.00	128.47
330.15	4010.00	127.41
330.15	4600.00	126.09
330.15	5030.00	125.63
335.15	2070.00	134.21
335.15	2540.00	133.22
335.15	2950.00	132.36
335.15	3440.00	131.44
335.15	4010.00	130.18
335.15	4600.00	128.80
335.15	5030.00	128.27
340.15	2540.00	137.25
340.15	2950.00	136.06
340.15	3440.00	134.94
340.15	4010.00	133.49
340.15	4600.00	131.90
340.15	5030.00	131.31
345.15	2540.00	141.88
345.15	2950.00	140.36
345.15	3440.00	139.04
345.15	4010.00	137.32
345.15	4600.00	135.34
345.15	5030.00	134.61
350.15	2950.00	146.10

350.15	3440.00	144.05
350.15	4010.00	141.88
350.15	4600.00	139.43
350.15	5030.00	138.51
355.15	3440.00	150.66
355.15	4010.00	147.56
355.15	4600.00	144.45
355.15	5030.00	143.20
360.15	4010.00	155.02
360.15	4600.00	151.06
360.15	5030.00	149.14

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Legend

af:	Acentric Factor
chg:	Standard gas enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dm:	Dipole Moment
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
kvisc:	Kinematic viscosity
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure

pt:	Triple Point Pressure
pvap:	Vapor pressure
rho:	Liquid Density
rinpol:	Non-polar retention indices
srf:	Surface Tension
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume
zc:	Critical Compressibility

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