CHF2CH2OH

Other names:	2,2-difluoroethanol
	Difluoroethanol
	ethanol, 2,2-difluoro-
Inchi:	InChI=1S/C2H4F2O/c3-2(4)1-5/h2,5H,1H2
InchiKey:	VOGSDFLJZPNWHY-UHFFFAOYSA-N
Formula:	C2H4F2O
SMILES:	OCC(F)F
Mol. weight [g/mol]:	82.05
CAS:	359-13-7

Physical Properties

Property code	Value	Unit	Source
affp	727.40	kJ/mol	NIST Webbook
basg	697.00	kJ/mol	NIST Webbook
chl	-1028.20	kJ/mol	NIST Webbook
gf	-562.92	kJ/mol	Joback Method
hf	-634.34	kJ/mol	Joback Method
hfus	7.66	kJ/mol	Joback Method
hvap	34.70	kJ/mol	Joback Method
log10ws	-0.24		Crippen Method
logp	0.244		Crippen Method
mcvol	48.450	ml/mol	McGowan Method
pc	5102.04	kPa	Joback Method
rinpol	481.00		NIST Webbook
tb	368.50 ± 0.50	K	NIST Webbook
tb	368.70	K	NIST Webbook
tb	368.50 ± 0.50	K	NIST Webbook
tc	483.57	K	Joback Method
tf	159.30	K	Joback Method
vc	0.197	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	87.38	J/mol×K	335.44	Joback Method
cpg	91.43	J/mol×K	360.13	Joback Method
cpg	95.34	J/mol×K	384.82	Joback Method
cpg	99.11	J/mol×K	409.50	Joback Method
cpg	102.75	J/mol×K	434.19	Joback Method
cpg	106.25	J/mol×K	458.88	Joback Method
cpg	109.62	J/mol×K	483.57	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C359137&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Henry s Law Constants of Organic Compounds in Water and n-Octane at T = 293.2 K:	https://www.doi.org/10.1021/je900711h
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

affp:	Proton affinity
basg:	Gas basicity
chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from: