Ethanamine, N,N-difluoro-

Other names:	Ethylamine, N,N-difluoro- N,N-Difluoroethylamine Ethyldifluoroamine
Inchi:	InChI=1S/C2H5F2N/c1-2-5(3)4/h2H2,1H3
InchiKey:	IAUJKTVVMRFADH-UHFFFAOYSA-N
Formula:	C2H5F2N
SMILES:	CCN(F)F
Mol. weight [g/mol]:	81.06
CAS:	758-18-9

Physical Properties

Property code	Value	Unit	Source
gf	-312.88	kJ/mol	Joback Method
hf	-409.30	kJ/mol	Joback Method
hfus	10.12	kJ/mol	Joback Method
hvap	20.46	kJ/mol	Joback Method
log10ws	-0.92		Crippen Method
logp	1.077		Crippen Method
mcvol	52.560	ml/mol	McGowan Method
pc	4432.62	kPa	Joback Method
tb	256.14	K	Joback Method
tc	395.05	K	Joback Method
tf	145.95	K	Joback Method
vc	0.202	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	75.90	J/mol×K	256.14	Joback Method
cpg	81.25	J/mol×K	279.29	Joback Method
cpg	86.41	J/mol×K	302.44	Joback Method
cpg	91.38	J/mol×K	325.59	Joback Method
cpg	96.17	J/mol×K	348.74	Joback Method
cpg	100.78	J/mol×K	371.90	Joback Method

cpg	105.21	J/mol×K	395.05	Joback Method
hvapt	27.30	kJ/mol	250.00	NIST Webbook
hvapt	25.70	kJ/mol	288.00	NIST Webbook

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C758189&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

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
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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