Methanamine, N,N-difluoro-

Other names:	Methylamine, N,N-difluoro- (Difluoroamino)methane N,N-Difluoromethylamine Methyldifluoroamine
Inchi:	InChI=1S/CH3F2N/c1-4(2)3/h1H3
InchiKey:	KTNJOGGUCNTDHY-UHFFFAOYSA-N
Formula:	CH3F2N
SMILES:	CN(F)F
Mol. weight [g/mol]:	67.04
CAS:	753-58-2

Physical Properties

Property code	Value	Unit	Source
gf	-321.30	kJ/mol	Joback Method
hf	-388.66	kJ/mol	Joback Method
hfus	7.53	kJ/mol	Joback Method
hvap	18.23	kJ/mol	Joback Method
log10ws	-0.50		Crippen Method
logp	0.687		Crippen Method
mcvol	38.470	ml/mol	McGowan Method
pc	5058.59	kPa	Joback Method
tb	233.26	K	Joback Method
tc	368.79	K	Joback Method
tf	134.68	K	Joback Method
vc	0.145	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	51.98	J/mol×K	233.26	Joback Method
cpg	55.80	J/mol×K	255.85	Joback Method
cpg	59.47	J/mol×K	278.44	Joback Method
cpg	63.01	J/mol×K	301.02	Joback Method
cpg	66.42	J/mol×K	323.61	Joback Method

cpg	69.70	J/mol×K	346.20	Joback Method
cpg	72.85	J/mol×K	368.79	Joback Method
hvapt	23.50	kJ/mol	230.00	NIST Webbook
hvapt	22.90	kJ/mol	257.00	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C753582&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method

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