Ethane, 2-bromo-1,1-difluoro-

Other names: 2-Bromo-1,1-difluoroethane
Inchi: InChI=1S/C2H3BrF2/c3-1-2(4)5/h2H,1H2
InchiKey: JVYROUWXXSWCMI-UHFFFAOYSA-N
Formula: C2H3BrF2
SMILES: FC(F)CBr
Mol. weight [g/mol]: 144.95
CAS: 359-07-9

Physical Properties

Property code	Value	Unit	Source
gf	-411.78	kJ/mol	Joback Method
hf	-455.78	kJ/mol	Joback Method
hfus	8.86	kJ/mol	Joback Method
hvap	24.46	kJ/mol	Joback Method
log10ws	-1.41		Crippen Method
logp	1.646		Crippen Method
mcvol	60.080	ml/mol	McGowan Method
pc	4938.44	kPa	Joback Method
tb	330.40	K	NIST Webbook
tc	478.01	K	Joback Method
tf	158.28	K	Joback Method
vc	0.239	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	83.95	J/mol×K	309.42	Joback Method
cpg	88.31	J/mol×K	337.52	Joback Method
cpg	92.46	J/mol×K	365.62	Joback Method
cpg	96.40	J/mol×K	393.71	Joback Method
cpg	100.14	J/mol×K	421.81	Joback Method
cpg	103.69	J/mol×K	449.91	Joback Method
cpg	107.07	J/mol×K	478.01	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
KDB:	https://www.cheric.org/files/research/kdb/mol/mol1563.mol
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C359079&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
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