1,1-Dibromodifluoroethylene

Other names: Ethene, 1,1-dibromo-2,2-difluoro-
1,1-dibromo-2,2-difluoroethylene
Inchi: InChI=1S/C2Br2F2/c3-1(4)2(5)6
InchiKey: VTFPVQZQUFXLFH-UHFFFAOYSA-N
Formula: C2Br2F2
SMILES: FC(F)=C(Br)Br
Mol. weight [g/mol]: 221.83
CAS: 430-85-3

Physical Properties

Property code	Value	Unit	Source
gf	-331.90	kJ/mol	Joback Method
hf	-326.53	kJ/mol	Joback Method
hfus	15.25	kJ/mol	Joback Method
hvap	31.40	kJ/mol	Joback Method
log10ws	-3.06		Crippen Method
logp	2.842		Crippen Method
mcvol	73.280	ml/mol	McGowan Method
pc	5917.16	kPa	Joback Method
tb	341.50 ± 0.50	K	NIST Webbook
tc	585.91	K	Joback Method
tf	200.08	K	Joback Method
vc	0.289	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	92.68	J/mol×K	379.94	Joback Method
cpg	96.26	J/mol×K	414.27	Joback Method
cpg	99.43	J/mol×K	448.60	Joback Method
cpg	102.23	J/mol×K	482.93	Joback Method
cpg	104.70	J/mol×K	517.25	Joback Method
cpg	106.86	J/mol×K	551.58	Joback Method
cpg	108.77	J/mol×K	585.91	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C430853&Units=SI

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