Ethene, 1-bromo-1-chloro-2,2-difluoro-

Other names:	Ethylene, 1-bromo-1-chloro-2,2-difluoro-
	1-Bromo-1-chloro-2,2-difluoroethene
	1-Bromo-1-chloro-2,2-difluoroethylene
	2-Bromo-2-chloro-1,1-difluoroethylene
	Bromochloro-1,1-difluoroethylene
	1,1-Difluoro-2-chloro-2-bromo-ethylene
Inchi:	InChI=1S/C2BrClF2/c3-1(4)2(5)6
InchiKey:	NBYWEYFBDHRDOS-UHFFFAOYSA-N
Formula:	C2BrClF2
SMILES:	FC(F)=C(Cl)Br
Mol. weight [g/mol]:	177.38
CAS:	758-24-7

Physical Properties

Property code	Value	Unit	Source
gf	-358.15	kJ/mol	Joback Method
hf	-368.60	kJ/mol	Joback Method
hfus	14.16	kJ/mol	Joback Method
hvap	29.35	kJ/mol	Joback Method
log10ws	-2.79		Crippen Method
logp	2.686		Crippen Method
mcvol	68.020	ml/mol	McGowan Method
pc	5058.59	kPa	Joback Method
tb	351.21	K	Joback Method
tc	543.54	K	Joback Method
tf	170.20	K	Joback Method
vc	0.277	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	88.23	J/mol×K	351.21	Joback Method
cpg	91.79	J/mol×K	383.26	Joback Method
cpg	95.02	J/mol×K	415.32	Joback Method

cpg	97.93	J/mol×K	447.37	Joback Method
cpg	100.56	J/mol×K	479.43	Joback Method
cpg	102.93	J/mol×K	511.48	Joback Method
cpg	105.05	J/mol×K	543.54	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=C758247&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