cis-1,2-Difluorocyclopropane

Inchi: InChI=1S/C3H4F2/c4-2-1-3(2)5/h2-3H,1H2/t2-,3+
InchiKey: KFGHUDYAMNUDEI-WSOKHJQSSA-N
Formula: C3H4F2
SMILES: FC1CC1F
Mol. weight [g/mol]: 78.06
CAS: 57137-41-4

Physical Properties

Property code	Value	Unit	Source
gf	-362.20	kJ/mol	Joback Method
hf	-445.01	kJ/mol	Joback Method
hfus	8.89	kJ/mol	Joback Method
hvap	20.24	kJ/mol	Joback Method
log10ws	-0.90		Crippen Method
logp	1.066		Crippen Method
mcvol	45.810	ml/mol	McGowan Method
pc	4450.38	kPa	Joback Method
tb	268.65	K	Joback Method
tc	422.79	K	Joback Method
tf	138.45	K	Joback Method
vc	0.196	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	63.13	J/mol×K	268.65	Joback Method
cpg	70.14	J/mol×K	294.34	Joback Method
cpg	76.81	J/mol×K	320.03	Joback Method
cpg	83.19	J/mol×K	345.72	Joback Method
cpg	89.26	J/mol×K	371.41	Joback Method
cpg	95.04	J/mol×K	397.10	Joback Method
cpg	100.55	J/mol×K	422.79	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C57137414&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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