Butane, 1,4-difluoro-

Inchi: InChI=1S/C4H8F2/c5-3-1-2-4-6/h1-4H2
InchiKey: CXHPKSYTQFAXIN-UHFFFAOYSA-N
Formula: C4H8F2
SMILES: FCCCCF
Mol. weight [g/mol]: 94.10
CAS: 372-90-7

Physical Properties

Property code	Value	Unit	Source
gf	-406.82	kJ/mol	Joback Method
hf	-518.11	kJ/mol	Joback Method
hfus	12.28	kJ/mol	Joback Method
hvap	22.86	kJ/mol	Joback Method
log10ws	-1.20		Crippen Method
logp	1.706		Crippen Method
mcvol	70.760	ml/mol	McGowan Method
pc	3493.01	kPa	Joback Method
rinpol	609.00		NIST Webbook
rinpol	609.00		NIST Webbook
tb	289.46	K	Joback Method
tc	432.80	K	Joback Method
tf	136.02	K	Joback Method
vc	0.295	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	111.53	J/mol×K	289.46	Joback Method
cpg	118.31	J/mol×K	313.35	Joback Method
cpg	124.88	J/mol×K	337.24	Joback Method
cpg	131.25	J/mol×K	361.13	Joback Method
cpg	137.42	J/mol×K	385.02	Joback Method
cpg	143.39	J/mol×K	408.91	Joback Method
cpg	149.17	J/mol×K	432.80	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=C372907&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume