Cyclobutane carboxamide, 3,3-dimethyl

Inchi: InChI=1S/C7H13NO/c1-7(2)3-5(4-7)6(8)9/h5H,3-4H2,1-2H3,(H2,8,9)
InchiKey: KLXFVGBJERPUNU-UHFFFAOYSA-N
Formula: C7H13NO
SMILES: CC1(C)CC(C(N)=O)C1
Mol. weight [g/mol]: 127.18
CAS: 89894-97-3

Physical Properties

Property code	Value	Unit	Source
gf	-18.96	kJ/mol	Joback Method
hf	-205.06	kJ/mol	Joback Method
hfus	11.49	kJ/mol	Joback Method
hvap	47.19	kJ/mol	Joback Method
log10ws	-1.37		Crippen Method
logp	0.908		Crippen Method
mcvol	110.180	ml/mol	McGowan Method
pc	3891.64	kPa	Joback Method
tb	492.54	K	Joback Method
tc	713.46	K	Joback Method
tf	335.92	K	Joback Method
vc	0.408	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	256.25	J/mol×K	492.54	Joback Method
cpg	270.17	J/mol×K	529.36	Joback Method
cpg	283.06	J/mol×K	566.18	Joback Method
cpg	295.06	J/mol×K	603.00	Joback Method
cpg	306.29	J/mol×K	639.82	Joback Method
cpg	316.86	J/mol×K	676.64	Joback Method
cpg	326.91	J/mol×K	713.46	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=C89894973&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