Cyclobutanecarboxylic acid, 3,3-dimethyl-

Inchi: InChI=1S/C7H12O2/c1-7(2)3-5(4-7)6(8)9/h5H,3-4H2,1-2H3,(H,8,9)
InchiKey: UWOAWSLEKWLDNR-UHFFFAOYSA-N
Formula: C7H12O2
SMILES: CC1(C)CC(C(=O)O)C1
Mol. weight [g/mol]: 128.17
CAS: 34970-18-8

Physical Properties

Property code	Value	Unit	Source
gf	-222.23	kJ/mol	Joback Method
hf	-391.08	kJ/mol	Joback Method
hfus	10.38	kJ/mol	Joback Method
hvap	53.23	kJ/mol	Joback Method
log10ws	-1.26		Crippen Method
logp	1.507		Crippen Method
mcvol	106.070	ml/mol	McGowan Method
pc	4067.32	kPa	Joback Method
tb	512.19	K	Joback Method
tc	708.14	K	Joback Method
tf	313.48	K	Joback Method
vc	0.399	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	251.57	J/mol×K	512.19	Joback Method
cpg	262.98	J/mol×K	544.85	Joback Method
cpg	273.64	J/mol×K	577.51	Joback Method
cpg	283.65	J/mol×K	610.16	Joback Method
cpg	293.09	J/mol×K	642.82	Joback Method
cpg	302.05	J/mol×K	675.48	Joback Method
cpg	310.62	J/mol×K	708.14	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=C34970188&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