2,6-Piperidinedione, 4,4-dimethyl-

Other names:	Glutarimide, 3,3-dimethyl- «beta»,«beta»-Dimethylglutarimide 4,4-Dimethyl-2,6-piperidinedione 3,3-Dimethylglutarimide 4,4-dimethylpiperidine-2,6-dione
Inchi:	InChI=1S/C7H11NO2/c1-7(2)3-5(9)8-6(10)4-7/h3-4H2,1-2H3,(H,8,9,10)
InchiKey:	YUJCWMGBRDBPDL-UHFFFAOYSA-N
Formula:	C7H11NO2
SMILES:	CC1(C)CC(=O)NC(=O)C1
Mol. weight [g/mol]:	141.17
CAS:	1123-40-6

Physical Properties

Property code	Value	Unit	Source
gf	-130.45	kJ/mol	Joback Method
hf	-355.84	kJ/mol	Joback Method
hfus	8.03	kJ/mol	Joback Method
hvap	45.71	kJ/mol	Joback Method
log10ws	-1.15		Crippen Method
logp	0.449		Crippen Method
mcvol	111.750	ml/mol	McGowan Method
pc	4189.32	kPa	Joback Method
tb	563.54	K	Joback Method
tc	820.30	K	Joback Method
tf	441.40	K	Joback Method
vc	0.409	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	271.30	J/mol×K	563.54	Joback Method
cpg	286.84	J/mol×K	606.33	Joback Method
cpg	301.64	J/mol×K	649.13	Joback Method
cpg	315.76	J/mol×K	691.92	Joback Method

cpg	329.25	J/mol×K	734.72	Joback Method
cpg	342.17	J/mol×K	777.51	Joback Method
cpg	354.58	J/mol×K	820.30	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=C1123406&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