Cyclopentanone, 2-cyclopentylidene-

Other names:	[Bicyclopentyliden]-2-one
	[«delta»1,1'-Bicyclopentan]-2-one
	2-Cyclopentylidenecyclopentanone
	2-Cyclopentylidene-1-cyclopentanone
	cyclopentylidenecyclopentan-2-one
Inchi:	InChI=1S/C10H14O/c11-10-7-3-6-9(10)8-4-1-2-5-8/h1-7H2
InchiKey:	NYSYNXRPXJZYFY-UHFFFAOYSA-N
Formula:	C10H14O
SMILES:	O=C1CCCC1=C1CCCC1
Mol. weight [g/mol]:	150.22
CAS:	825-25-2

Physical Properties

Property code	Value	Unit	Source
gf	9.95	kJ/mol	Joback Method
hf	-190.95	kJ/mol	Joback Method
hfus	7.34	kJ/mol	Joback Method
hvap	44.85	kJ/mol	Joback Method
log10ws	-2.93		Crippen Method
logp	2.610		Crippen Method
mcvol	127.310	ml/mol	McGowan Method
pc	3415.86	kPa	Joback Method
tb	545.04	K	Joback Method
tc	789.43	K	Joback Method
tf	326.76	K	Joback Method
vc	0.472	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	305.61	J/mol×K	545.04	Joback Method
cpg	323.87	J/mol×K	585.77	Joback Method
cpg	340.98	J/mol×K	626.50	Joback Method
cpg	356.97	J/mol×K	667.23	Joback Method

cpg	371.89	J/mol×K	707.96	Joback Method
cpg	385.76	J/mol×K	748.69	Joback Method
cpg	398.62	J/mol×K	789.43	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C825252&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

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