2-Norbornanone

Other names:	Bicyclo[2.2.1]heptan-2-one
	Norbornan-2-one
	Norcampher
	Norcamphor
	Bicyclo(2.2.1)-2-heptanone
	Bicyclo[2.2.1]heptane-2-one
	(±)-Bicyclo[2.2.1]heptan-2-one
	8,9,10-trinorbornan-2-one
Inchi:	InChI=1S/C7H10O/c8-7-4-5-1-2-6(7)3-5/h5-6H,1-4H2
InchiKey:	KPMKEVXVVHNIEY-UHFFFAOYSA-N
Formula:	C7H10O
SMILES:	O=C1CC2CCC1C2
Mol. weight [g/mol]:	110.15
CAS:	497-38-1

Physical Properties

Property code	Value	Unit	Source
affp	847.40	kJ/mol	NIST Webbook
basg	815.50	kJ/mol	NIST Webbook
chs	-3967.10 ± 2.70	kJ/mol	NIST Webbook
chs	-3957.20 ± 4.20	kJ/mol	NIST Webbook
gf	-5.13	kJ/mol	Joback Method
hf	-170.60 ± 4.90	kJ/mol	NIST Webbook
hfs	-216.60 ± 2.70	kJ/mol	NIST Webbook
hfus	7.57	kJ/mol	Joback Method
hsub	49.00 ± 2.00	kJ/mol	NIST Webbook
hsub	49.00 ± 1.70	kJ/mol	NIST Webbook
hvap	51.50	kJ/mol	NIST Webbook
hvap	49.60	kJ/mol	NIST Webbook
hvap	50.00	kJ/mol	NIST Webbook
ie	8.90	eV	NIST Webbook
ie	8.94 ± 0.02	eV	NIST Webbook
ie	9.17 ± 0.02	eV	NIST Webbook
ie	9.14	eV	NIST Webbook
log10ws	-1.34		Crippen Method
logp	1.375		Crippen Method
mcvol	89.340	ml/mol	McGowan Method

pc	4056.96	kPa	Joback Method
rinpol	983.00		NIST Webbook
rinpol	983.00		NIST Webbook
tb	443.20	K	NIST Webbook
tc	669.43	K	Joback Method
tf	269.23	K	Joback Method
vc	0.341	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	191.02	J/mol×K	445.13	Joback Method
cpg	206.16	J/mol×K	482.51	Joback Method
cpg	220.39	J/mol×K	519.90	Joback Method
cpg	233.77	J/mol×K	557.28	Joback Method
cpg	246.33	J/mol×K	594.66	Joback Method
cpg	258.10	J/mol×K	632.05	Joback Method
cpg	269.14	J/mol×K	669.43	Joback Method
hfust	3.39	kJ/mol	368.70	NIST Webbook

Sources

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=C497381&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

affp: Proton affinity
basg: Gas basicity
chs: Standard solid enthalpy of combustion
cpg: Ideal gas heat capacity
gf: Standard Gibbs free energy of formation

hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hsub:	Enthalpy of sublimation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
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