2-Acetyl-5-norbornene

Other names:	5-Acetyl-2-norbornene
	Ethanone, 1-bicyclo[2.2.1]hept-5-en-2-yl-
	Bicyclo[2.2.1]hept-2-ene, 5-acetyl-
	Bicyclo[2.2.1]hept-5-ene, 2-acetyl-
	methyl (8,9,10-trinorborn-5-en-2-yl) ketone
Inchi:	InChI=1S/C9H12O/c1-6(10)9-5-7-2-3-8(9)4-7/h2-3,7-9H,4-5H2,1H3
InchiKey:	NIMLCWCLVJRPFY-UHFFFAOYSA-N
Formula:	C9H12O
SMILES:	CC(=O)C1CC2C=CC1C2
Mol. weight [g/mol]:	136.19
CAS:	5063-03-6

Physical Properties

Property code	Value	Unit	Source
gf	27.63	kJ/mol	Joback Method
hf	-164.79	kJ/mol	Joback Method
hfus	17.13	kJ/mol	Joback Method
hvap	42.36	kJ/mol	Joback Method
log10ws	-1.79		Crippen Method
logp	1.788		Crippen Method
mcvol	113.220	ml/mol	McGowan Method
pc	3337.38	kPa	Joback Method
tb	471.43	K	Joback Method
tc	684.15	K	Joback Method
tf	270.00	K	Joback Method
vc	0.436	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	253.18	J/mol×K	471.43	Joback Method
cpg	323.10	J/mol×K	648.70	Joback Method
cpg	310.98	J/mol×K	613.25	Joback Method
cpg	298.00	J/mol×K	577.79	Joback Method

cpg	284.07	J/mol×K	542.34	Joback Method
cpg	269.16	J/mol×K	506.88	Joback Method
cpg	334.40	J/mol×K	684.15	Joback Method
dvisc	0.0008335	Pa×s	471.43	Joback Method
dvisc	0.0008670	Pa×s	437.86	Joback Method
dvisc	0.0009077	Pa×s	404.29	Joback Method
dvisc	0.0009584	Pa×s	370.72	Joback Method
dvisc	0.0010228	Pa×s	337.14	Joback Method
dvisc	0.0011074	Pa×s	303.57	Joback Method
dvisc	0.0012230	Pa×s	270.00	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	358.20	K	2.40	NIST Webbook

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=C5063036&Units=SI

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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