Bicyclo[2.2.1]heptane, 2-methyl-, exo-

Other names:	Norbornane, 2-methyl-, exo- exo-2-Methylbicyclo[2.2.1]heptane exo-2-Methylnorbornane exo-2-methylbicyclo-(2,2,1)-heptane
Inchi:	InChI=1S/C8H14/c1-6-4-7-2-3-8(6)5-7/h6-8H,2-5H2,1H3/t6-,7?,8?/m1/s1
InchiKey:	KWSARSUDWPZTFF-JECWYVHBSA-N
Formula:	C8H14
SMILES:	CC1CC2CCC1C2
Mol. weight [g/mol]:	110.20
CAS:	872-78-6

Physical Properties

Property code	Value	Unit	Source
chl	-5026.40 ± 1.10	kJ/mol	NIST Webbook
gf	118.17	kJ/mol	Joback Method
hf	-89.35	kJ/mol	Joback Method
hfl	-122.50 ± 1.20	kJ/mol	NIST Webbook
hfus	11.72	kJ/mol	Joback Method
hvap	33.09	kJ/mol	Joback Method
log10ws	-2.24		Crippen Method
logp	2.442		Crippen Method
mcvol	101.860	ml/mol	McGowan Method
pc	3325.84	kPa	Joback Method
rinpol	815.00		NIST Webbook
rinpol	820.80		NIST Webbook
rinpol	815.00		NIST Webbook
sl	246.20	J/mol×K	NIST Webbook
tb	395.52	K	Joback Method
tc	596.29	K	Joback Method
tf	208.04	K	Joback Method
tt	164.10 ± 0.02	K	NIST Webbook
vc	0.389	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	277.84	J/mol×K	562.83	Joback Method
cpg	199.71	J/mol×K	395.52	Joback Method
cpg	217.30	J/mol×K	428.98	Joback Method
cpg	233.86	J/mol×K	462.44	Joback Method
cpg	249.43	J/mol×K	495.91	Joback Method
cpg	264.08	J/mol×K	529.37	Joback Method
cpg	290.77	J/mol×K	596.29	Joback Method
cpl	185.80	J/mol×K	298.15	NIST Webbook
dvisc	0.0004697	Pa×s	395.52	Joback Method
dvisc	0.0004672	Pa×s	208.04	Joback Method
dvisc	0.0004679	Pa×s	239.29	Joback Method
dvisc	0.0004684	Pa×s	270.53	Joback Method
dvisc	0.0004688	Pa×s	301.78	Joback Method
dvisc	0.0004692	Pa×s	333.03	Joback Method
dvisc	0.0004694	Pa×s	364.27	Joback Method
hfust	8.38	kJ/mol	164.10	NIST Webbook
hfust	8.38	kJ/mol	164.10	NIST Webbook
hfust	8.37	kJ/mol	164.10	NIST Webbook
sfust	51.00	J/mol×K	164.10	NIST Webbook

Sources

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=C872786&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

chl: Standard liquid enthalpy of combustion
cpg: Ideal gas heat capacity
cpl: Liquid phase heat capacity

dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
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
rinpol:	Non-polar retention indices
sfust:	Entropy of fusion at a given temperature
sl:	Liquid phase molar entropy at standard conditions
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume

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