Bicyclo[2.2.1]heptane, 2-methyl-

Other names: Norbornane, 2-methyl-
2-Methylbicyclo[2.2.1]heptane
2-Methylnorbornane
Inchi: InChI=1S/C8H14/c1-6-4-7-2-3-8(6)5-7/h6-8H,2-5H2,1H3
InchiKey: KWSARSUDWPZTFF-UHFFFAOYSA-N
Formula: C8H14
SMILES: CC1CC2CCC1C2
Mol. weight [g/mol]: 110.20
CAS: 15185-11-2

Physical Properties

Property code	Value	Unit	Source
gf	118.17	kJ/mol	Joback Method
hf	-89.35	kJ/mol	Joback Method
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
tb	395.52	K	Joback Method
tc	596.29	K	Joback Method
tf	208.04	K	Joback Method
tt	278.25 ± 0.02	K	NIST Webbook
vc	0.389	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	199.71	J/mol×K	395.52	Joback Method
cpg	277.84	J/mol×K	562.83	Joback Method
cpg	264.08	J/mol×K	529.37	Joback Method
cpg	249.43	J/mol×K	495.91	Joback Method
cpg	233.86	J/mol×K	462.44	Joback Method

cpg	217.30	J/mol×K	428.98	Joback Method
cpg	290.77	J/mol×K	596.29	Joback Method
dvisc	0.0004697	Pa×s	395.52	Joback Method
dvisc	0.0004694	Pa×s	364.27	Joback Method
dvisc	0.0004692	Pa×s	333.03	Joback Method
dvisc	0.0004688	Pa×s	301.78	Joback Method
dvisc	0.0004684	Pa×s	270.53	Joback Method
dvisc	0.0004679	Pa×s	239.29	Joback Method
dvisc	0.0004672	Pa×s	208.04	Joback Method

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=C15185112&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tc: Critical Temperature
tf: Normal melting (fusion) point
tt: Triple Point Temperature
vc: Critical Volume