Bicyclo[3.1.1]hept-3-en-2-ol, 4,6,6-trimethyl-, [1S-(1«alpha»,2«beta»,5«alpha»)]-

Other names: (-)-(Z)-Verbenol
(-)-Verbenol
(-)-cis-verbenol
(1S,2S,5S)-4,6,6-trimethylbicyclo[3.1.1]hept-3-en-2-ol
(1S,4S,5S)-cis-verbenol
(1S-(1«alpha»,2«beta»,5«alpha»))-4,6,6-Trimethylbicyclo(3.1.1)hept-3-en-2-ol
(S)-cis-verbenol
Bicyclo(3.1.1)hept-3-en-2-ol, 4,6,6-trimethyl-, (1S,2S,5S)-
S-(-)-cis-Verbenol

Inchi: InChI=1S/C10H16O/c1-6-4-9(11)8-5-7(6)10(8,2)3/h4,7-9,11H,5H2,1-3H3/t7?,8?,9-/m1/s1

InchiKey: WONIGEXYPVIKFS-AMDVSUOASA-N

Formula: C10H16O

SMILES: CC1=CC(O)C2CC1C2(C)C

Mol. weight [g/mol]: 152.23

CAS: 18881-04-4

Physical Properties

Property code	Value	Unit	Source
gf	5.32	kJ/mol	Joback Method
hf	-241.65	kJ/mol	Joback Method
hfus	16.59	kJ/mol	Joback Method
hvap	53.72	kJ/mol	Joback Method
log10ws	-2.30		Crippen Method
logp	1.969		Crippen Method
mcvol	131.610	ml/mol	McGowan Method
pc	3082.99	kPa	Joback Method
rinpol	1128.00		NIST Webbook
rinpol	1131.00		NIST Webbook
rinpol	1131.00		NIST Webbook
rinpol	1132.00		NIST Webbook
rinpol	1110.00		NIST Webbook
rinpol	1132.00		NIST Webbook
rinpol	1142.00		NIST Webbook
rinpol	1141.00		NIST Webbook
rinpol	1122.00		NIST Webbook
rinpol	1139.00		NIST Webbook
rinpol	1132.00		NIST Webbook

rinpol	1153.00		NIST Webbook
rinpol	1110.00		NIST Webbook
ripol	1663.00		NIST Webbook
ripol	1663.00		NIST Webbook
ripol	1663.00		NIST Webbook
ripol	1663.00		NIST Webbook
ripol	1660.00		NIST Webbook
ripol	1654.00		NIST Webbook
ripol	1645.00		NIST Webbook
tb	533.17	K	Joback Method
tc	729.30	K	Joback Method
tf	324.34	K	Joback Method
vc	0.502	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	336.85	J/mol×K	533.17	Joback Method
cpg	351.53	J/mol×K	565.86	Joback Method
cpg	365.30	J/mol×K	598.55	Joback Method
cpg	378.26	J/mol×K	631.23	Joback Method
cpg	390.53	J/mol×K	663.92	Joback Method
cpg	402.21	J/mol×K	696.61	Joback Method
cpg	413.40	J/mol×K	729.30	Joback Method
hvapt	80.00	kJ/mol	298.15	Thermodynamic study of selected monoterpenes

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Thermodynamic study of selected monoterpenes: https://www.doi.org/10.1016/j.jct.2013.01.009

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=C18881044&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
hvapt:	Enthalpy of vaporization at a given temperature
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume