4a(2H)-Naphthalenol,octahydro-8a-methyl-trans-

Inchi: InChI=1S/C11H20O/c1-10-6-2-4-8-11(10,12)9-5-3-7-10/h12H,2-9H2,1H3/t10-,11+
InchiKey: UWRUMJPLZZBUCM-PHIMTYICSA-N
Formula: C11H20O
SMILES: CC12CCCCC1(O)CCCC2
Mol. weight [g/mol]: 168.28
CAS: 5173-73-9

Physical Properties

Property code	Value	Unit	Source
gf	-32.96	kJ/mol	Joback Method
hf	-271.16	kJ/mol	Joback Method
hfus	3.61	kJ/mol	Joback Method
hvap	54.97	kJ/mol	Joback Method
ie	9.41 ± 0.05	eV	NIST Webbook
log10ws	-3.35		Crippen Method
logp	2.872		Crippen Method
mcvol	150.000	ml/mol	McGowan Method
pc	3333.53	kPa	Joback Method
tb	574.30	K	Joback Method
tc	794.07	K	Joback Method
tf	344.15	K	Joback Method
vc	0.548	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	403.12	J/mol×K	574.30	Joback Method
cpg	421.30	J/mol×K	610.93	Joback Method
cpg	438.27	J/mol×K	647.56	Joback Method
cpg	454.27	J/mol×K	684.19	Joback Method
cpg	469.54	J/mol×K	720.82	Joback Method
cpg	484.30	J/mol×K	757.45	Joback Method
cpg	498.81	J/mol×K	794.07	Joback Method

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=C5173739&Units=SI

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
ie:	Ionization energy
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
vc:	Critical Volume