Naphthalene,1,2,3,4,4a,5,6,8a-octahydro-4a-methy

Inchi: InChI=1S/C11H18/c1-11-8-4-2-6-10(11)7-3-5-9-11/h2,6,10H,3-5,7-9H2,1H3/t10-,11-/m1/s
InchiKey: RKPODBOKSGTKIR-GHMZBOCLSA-N
Formula: C11H18
SMILES: CC12CCC=CC1CCCC2
Mol. weight [g/mol]: 150.26
CAS: 68211-37-0

Physical Properties

Property code	Value	Unit	Source
gf	139.31	kJ/mol	Joback Method
hf	-76.39	kJ/mol	Joback Method
hfus	7.04	kJ/mol	Joback Method
hvap	39.73	kJ/mol	Joback Method
ie	8.92 ± 0.05	eV	NIST Webbook
log10ws	-3.59		Crippen Method
logp	3.533		Crippen Method
mcvol	139.830	ml/mol	McGowan Method
pc	2976.29	kPa	Joback Method
tb	481.04	K	Joback Method
tc	711.88	K	Joback Method
tf	260.19	K	Joback Method
vc	0.517	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	317.95	J/mol×K	481.04	Joback Method
cpg	340.05	J/mol×K	519.51	Joback Method
cpg	360.46	J/mol×K	557.99	Joback Method
cpg	379.37	J/mol×K	596.46	Joback Method
cpg	396.93	J/mol×K	634.93	Joback Method
cpg	413.32	J/mol×K	673.41	Joback Method
cpg	428.71	J/mol×K	711.88	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=C68211370&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