Naphthalene, 1,2,3,4-tetrahydro-1,4,6-trimethyl-

Other names: 1,2,3,4-tetrahydro-1,4,6-trimethylnaphthalene
Inchi: InChI=1S/C13H18/c1-9-4-7-12-10(2)5-6-11(3)13(12)8-9/h4,7-8,10-11H,5-6H2,1-3H3
InchiKey: HIACZWPSGFMDRF-UHFFFAOYSA-N
Formula: C13H18
SMILES: Cc1ccc2c(c1)C(C)CCC2C
Mol. weight [g/mol]: 174.28
CAS: 22824-32-4

Physical Properties

Property code	Value	Unit	Source
gf	192.67	kJ/mol	Joback Method
hf	-51.76	kJ/mol	Joback Method
hfus	19.79	kJ/mol	Joback Method
hvap	47.91	kJ/mol	Joback Method
log10ws	-4.21		Crippen Method
logp	3.996		Crippen Method
mcvol	159.410	ml/mol	McGowan Method
pc	2395.87	kPa	Joback Method
tb	539.82	K	Joback Method
tc	761.35	K	Joback Method
tf	297.91	K	Joback Method
vc	0.604	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	381.81	J/mol×K	539.82	Joback Method
cpg	467.80	J/mol×K	724.43	Joback Method
cpg	452.70	J/mol×K	687.51	Joback Method
cpg	436.60	J/mol×K	650.59	Joback Method
cpg	419.45	J/mol×K	613.66	Joback Method
cpg	401.20	J/mol×K	576.74	Joback Method
cpg	481.94	J/mol×K	761.35	Joback Method
dvisc	0.0003468	Pa×s	539.82	Joback Method

dvisc	0.0003976	Pa×s	499.50	Joback Method
dvisc	0.0004671	Pa×s	459.18	Joback Method
dvisc	0.0005658	Pa×s	418.86	Joback Method
dvisc	0.0007141	Pa×s	378.55	Joback Method
dvisc	0.0009527	Pa×s	338.23	Joback Method
dvisc	0.0013740	Pa×s	297.91	Joback Method

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=C22824324&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
vc:	Critical Volume