

Naphthalene, 1-(1,1-dimethylethyl)decahydro-

Other names:	1-(1,1-dimethylethyl)decahydronaphthalene
Inchi:	InChI=1S/C14H26/c1-14(2,3)13-10-6-8-11-7-4-5-9-12(11)13/h11-13H,4-10H2,1-3H3
InchiKey:	WBLIUUUUYEJAFDN-UHFFFAOYSA-N
Formula:	C14H26
SMILES:	CC(C)(C)C1CCCC2CCCCC21
Mol. weight [g/mol]:	194.36
CAS:	56292-64-9

Physical Properties

Property code	Value	Unit	Source
gf	135.23	kJ/mol	Joback Method
hf	-240.42	kJ/mol	Joback Method
hfus	13.54	kJ/mol	Joback Method
hvap	45.67	kJ/mol	Joback Method
log10ws	-4.51		Crippen Method
logp	4.639		Crippen Method
mcvol	186.400	ml/mol	McGowan Method
pc	2036.39	kPa	Joback Method
tb	542.38	K	Joback Method
tc	763.98	K	Joback Method
tf	267.52	K	Joback Method
vc	0.690	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	488.97	J/molxK	542.38	Joback Method
cpg	604.80	J/molxK	727.04	Joback Method
cpg	584.71	J/molxK	690.11	Joback Method
cpg	563.17	J/molxK	653.18	Joback Method
cpg	540.09	J/molxK	616.25	Joback Method
cpg	515.38	J/molxK	579.31	Joback Method
cpg	623.52	J/molxK	763.98	Joback Method
dvisc	0.0003512	Paxs	542.38	Joback Method

dvisc	0.0004489	Paxs	496.57	Joback Method
dvisc	0.0006032	Paxs	450.76	Joback Method
dvisc	0.0008665	Paxs	404.95	Joback Method
dvisc	0.0013652	Paxs	359.14	Joback Method
dvisc	0.0024569	Paxs	313.33	Joback Method
dvisc	0.0054070	Paxs	267.52	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C56292649&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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

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