

Naphthalene, 1,2-dihydro-1,1,2-trimethyl

Inchi:	InChI=1S/C13H16/c1-10-8-9-11-6-4-5-7-12(11)13(10,2)3/h4-10H,1-3H3
InchiKey:	LNTKBBRCAIFQLG-UHFFFAOYSA-N
Formula:	C13H16
SMILES:	CC1C=Cc2ccccc2C1(C)C
Mol. weight [g/mol]:	172.27

Physical Properties

Property code	Value	Unit	Source
gf	226.77	kJ/mol	Joback Method
hf	32.73	kJ/mol	Joback Method
hfus	15.11	kJ/mol	Joback Method
hvap	46.39	kJ/mol	Joback Method
log10ws	-3.68		Crippen Method
logp	3.627		Crippen Method
mvol	155.110	ml/mol	McGowan Method
pc	2637.96	kPa	Joback Method
ripol	1740.00		NIST Webbook
ripol	1740.00		NIST Webbook
tb	534.24	K	Joback Method
tc	766.39	K	Joback Method
tf	310.05	K	Joback Method
vc	0.588	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	362.44	J/mol×K	534.24	Joback Method
cpg	380.85	J/mol×K	572.93	Joback Method
cpg	397.92	J/mol×K	611.62	Joback Method
cpg	413.82	J/mol×K	650.31	Joback Method
cpg	428.72	J/mol×K	689.00	Joback Method
cpg	442.78	J/mol×K	727.69	Joback Method
cpg	456.18	J/mol×K	766.39	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=R410770&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
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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