

1,4«alpha»-Dimethyl-1,2,3,4,4a,5,6,7-octahydro-na

Other names:	6,10-Dimethylbicyclo[4.4.0]dec-1-ene
Inchi:	InChI=1S/C12H20/c1-10-6-5-9-12(2)8-4-3-7-11(10)12/h7,10H,3-6,8-9H2,1-2H3
InchiKey:	QPKYDOXXVXJLPX-UHFFFAOYSA-N
Formula:	C12H20
SMILES:	CC1CCCC2(C)CCCC=C12
Mol. weight [g/mol]:	164.29

Physical Properties

Property code	Value	Unit	Source
gf	138.10	kJ/mol	Joback Method
hf	-108.50	kJ/mol	Joback Method
hfus	9.24	kJ/mol	Joback Method
hvap	42.62	kJ/mol	Joback Method
log10ws	-4.01		Crippen Method
logp	3.923		Crippen Method
mcvol	153.920	ml/mol	McGowan Method
pc	2646.11	kPa	Joback Method
rinpol	1241.00		NIST Webbook
tb	508.90	K	Joback Method
tc	737.01	K	Joback Method
tf	283.98	K	Joback Method
vc	0.574	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	367.15	J/mol×K	508.90	Joback Method
cpg	389.22	J/mol×K	546.92	Joback Method
cpg	409.74	J/mol×K	584.94	Joback Method
cpg	428.87	J/mol×K	622.95	Joback Method
cpg	446.77	J/mol×K	660.97	Joback Method
cpg	463.61	J/mol×K	698.99	Joback Method
cpg	479.54	J/mol×K	737.01	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=R424754&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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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