Naphthalene, decahydro-1,1,4a-trimethyl-6-methylene-5-(3-meth [4aS-(4a«alpha»,5«alpha»,8a«beta»)]-

Other names:	Labda-8(20),12,14-triene Biformen Biformene 1,1,4a-Trimethyl-6-methylene-5-[3-methyl-2,4-pentadienyl]decahydronaphthalene-, [4aS-(4a«alpha»,5«alpha»,8a«beta»)]- trans-Biformene cis-Biformene
Inchi:	InChI=1S/C20H32/c1-7-15(2)9-11-17-16(3)10-12-18-19(4,5)13-8-14-20(17,18)6/h7,9,17-
InchiKey:	VJVMMXUPZGOBSN-DKVGYUDOSA-N
Formula:	C20H32
SMILES:	C=CC(C)=CCC1C(=C)CCC2C(C)(C)CCCC12C
Mol. weight [g/mol]:	272.47
CAS:	5957-33-5

Physical Properties

Property code	Value	Unit	Source
gf	376.81	kJ/mol	Joback Method
hf	-28.27	kJ/mol	Joback Method
hfus	21.43	kJ/mol	Joback Method
hvap	57.23	kJ/mol	Joback Method
log10ws	-6.58		Crippen Method
logp	6.308		Crippen Method
mcvol	258.040	ml/mol	McGowan Method
pc	1439.16	kPa	Joback Method
rinpol	1962.00		NIST Webbook
rinpol	1979.00		NIST Webbook
rinpol	1985.00		NIST Webbook
rinpol	2004.00		NIST Webbook
rinpol	1931.00		NIST Webbook
ripol	2330.00		NIST Webbook
ripol	2330.00		NIST Webbook
ripol	2370.00		NIST Webbook
ripol	2344.00		NIST Webbook
tb	678.58	K	Joback Method
tc	899.61	K	Joback Method
tf	369.16	K	Joback Method
vc	0.978	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	753.52	J/mol×K	678.58	Joback Method
cpg	778.40	J/mol×K	715.42	Joback Method
cpg	802.20	J/mol×K	752.26	Joback Method
cpg	825.20	J/mol×K	789.09	Joback Method
cpg	847.65	J/mol×K	825.93	Joback Method
cpg	869.83	J/mol×K	862.77	Joback Method
cpg	891.99	J/mol×K	899.61	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=C5957335&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
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume