Naphthalene, decahydro-1,6-bis(methylene)-4-(1-methylethyl)-, (4«alpha»,4a«alpha»,8a«alpha»)-

Other names: «epsilon»-Muurolene

Inchi: InChI=1S/C15H24/c1-10(2)13-8-6-12(4)14-7-5-11(3)9-15(13)14/h10,13-15H,3-9H2,1-2H3

InchiKey: NOLWRMQDWRAODO-UHFFFAOYSA-N

Formula: C15H24

SMILES: C=C1CCC2C(=C)CCC(C(C)C)C2C1

Mol. weight [g/mol]: 204.35

CAS: 30021-46-6

Physical Properties

Property code	Value	Unit	Source
gf	244.53	kJ/mol	Joback Method
hf	-89.11	kJ/mol	Joback Method
hfus	17.71	kJ/mol	Joback Method
hvap	49.12	kJ/mol	Joback Method
log10ws	-4.63		Crippen Method
logp	4.581		Crippen Method
mcvol	191.890	ml/mol	McGowan Method
pc	1915.26	kPa	Joback Method
rinpol	1464.00		NIST Webbook
rinpol	1465.00		NIST Webbook
rinpol	1458.80		NIST Webbook
rinpol	1445.00		NIST Webbook
rinpol	1445.00		NIST Webbook
rinpol	1457.00		NIST Webbook
rinpol	1446.00		NIST Webbook
ripol	1714.00		NIST Webbook
ripol	1713.00		NIST Webbook
ripol	1676.00		NIST Webbook
tb	566.37	K	Joback Method
tc	779.32	K	Joback Method
tf	288.73	K	Joback Method
vc	0.719	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	499.92	J/mol×K	566.37	Joback Method
cpg	523.12	J/mol×K	601.86	Joback Method
cpg	545.00	J/mol×K	637.35	Joback Method
cpg	565.61	J/mol×K	672.85	Joback Method
cpg	584.99	J/mol×K	708.34	Joback Method
cpg	603.18	J/mol×K	743.83	Joback Method
cpg	620.22	J/mol×K	779.32	Joback Method
dvisc	0.0023414	Pa×s	288.73	Joback Method
dvisc	0.0014305	Pa×s	335.00	Joback Method
dvisc	0.0009850	Pa×s	381.28	Joback Method
dvisc	0.0007353	Pa×s	427.55	Joback Method
dvisc	0.0005812	Pa×s	473.82	Joback Method
dvisc	0.0004790	Pa×s	520.10	Joback Method
dvisc	0.0004074	Pa×s	566.37	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=C30021466&Units=SI

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
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