Naphthalene, 1-(2-propenyl)-

Other names: Naphthalene, 1-allyl-
«alpha»-Allylnaphthalene
1-Allylnaphthalene
1-(2-propenyl)-naphthalene
Inchi: InChI=1S/C13H12/c1-2-6-11-8-5-9-12-7-3-4-10-13(11)12/h2-5,7-10H,1,6H2
InchiKey: RJFCFNWLPJRCLR-UHFFFAOYSA-N
Formula: C13H12
SMILES: C=CCc1cccc2ccccc12
Mol. weight [g/mol]: 168.23
CAS: 2489-86-3

Physical Properties

Property code	Value	Unit	Source
gf	355.85	kJ/mol	Joback Method
hf	229.91	kJ/mol	Joback Method
hfus	18.82	kJ/mol	Joback Method
hvap	48.44	kJ/mol	Joback Method
log10ws	-4.35		Crippen Method
logp	3.568		Crippen Method
mcvol	146.510	ml/mol	McGowan Method
pc	2881.21	kPa	Joback Method
rinpol	253.94		NIST Webbook
rinpol	253.53		NIST Webbook
rinpol	252.95		NIST Webbook
rinpol	253.94		NIST Webbook
tb	539.20	K	NIST Webbook
tc	775.36	K	Joback Method
tf	306.15	K	Joback Method
vc	0.558	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	323.00	J/mol×K	544.16	Joback Method

cpg	338.35	J/mol×K	582.69	Joback Method
cpg	352.56	J/mol×K	621.23	Joback Method
cpg	365.71	J/mol×K	659.76	Joback Method
cpg	377.90	J/mol×K	698.29	Joback Method
cpg	389.19	J/mol×K	736.83	Joback Method
cpg	399.68	J/mol×K	775.36	Joback Method
dvisc	0.0015564	Pa×s	306.15	Joback Method
dvisc	0.0010101	Pa×s	345.82	Joback Method
dvisc	0.0007165	Pa×s	385.49	Joback Method
dvisc	0.0005419	Pa×s	425.16	Joback Method
dvisc	0.0004299	Pa×s	464.82	Joback Method
dvisc	0.0003536	Pa×s	504.49	Joback Method
dvisc	0.0002993	Pa×s	544.16	Joback Method

Sources

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=C2489863&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point

vc: Critical Volume