Naphthalene, 2-ethenyl-

Other names:	2-Vinylnaphthalene
	«beta»-Vinylnaphthalene
	2-EthenyInaphthalene
	2-ethenylnaphthalene
Inchi:	InChI=1S/C12H10/c1-2-10-7-8-11-5-3-4-6-12(11)9-10/h2-9H,1H2
InchiKey:	KXYAVSFOJVUIHT-UHFFFAOYSA-N
Formula:	C12H10
SMILES:	C=Cc1ccc2ccccc2c1
Mol. weight [g/mol]:	154.21
CAS:	827-54-3

Physical Properties

Property code	Value	Unit	Source
gf	347.43	kJ/mol	Joback Method
hf	250.55	kJ/mol	Joback Method
hfus	16.23	kJ/mol	Joback Method
hvap	46.21	kJ/mol	Joback Method
log10ws	-4.10		Crippen Method
logp	3.483		Crippen Method
mcvol	132.420	ml/mol	McGowan Method
pc	3202.78	kPa	Joback Method
rinpol	237.60		NIST Webbook
rinpol	1418.00		NIST Webbook
rinpol	245.39		NIST Webbook
rinpol	244.82		NIST Webbook
rinpol	1403.00		NIST Webbook
rinpol	246.20		NIST Webbook
rinpol	244.80		NIST Webbook
rinpol	230.82		NIST Webbook
rinpol	237.60		NIST Webbook
rinpol	245.81		NIST Webbook
rinpol	242.60		NIST Webbook
tb	521.28	K	Joback Method
tc	756.97	K	Joback Method
tf	339.00 ± 4.00	K	NIST Webbook
tf	338.40 ± 2.00	K	NIST Webbook
vc	0.502	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	277.80	J/mol×K	521.28	Joback Method
cpg	292.33	J/mol×K	560.56	Joback Method
cpg	305.74	J/mol×K	599.84	Joback Method
cpg	318.10	J/mol×K	639.12	Joback Method
cpg	329.51	J/mol×K	678.41	Joback Method
cpg	340.04	J/mol×K	717.69	Joback Method
cpg	349.78	J/mol×K	756.97	Joback Method
dvisc	0.0014610	Pa×s	294.88	Joback Method
dvisc	0.0009718	Pa×s	332.61	Joback Method
dvisc	0.0007024	Pa×s	370.35	Joback Method
dvisc	0.0005391	Pa×s	408.08	Joback Method
dvisc	0.0004327	Pa×s	445.81	Joback Method
dvisc	0.0003594	Pa×s	483.55	Joback Method
dvisc	0.0003067	Pa×s	521.28	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=C827543&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
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