Bicyclo[2.2.1]hept-2-ene, 5-ethenyl-

Other names:	2-Norbornene, 5-vinyl-
	2-Vinylbicyclo[2.2.1]hept-5-ene
	5-Vinylbicyclo[2.2.1]hept-2-ene
	Vinylnorbornene
	2-Vinylnorbornene
	2-Vinyl-5-norbornene
	5-Vinylnorbornene
	5-Vinyl-2-norbornene
	5-Vinylbicyclo[2.2.1]-2-heptene
	NSC 61529
	5-vinylnorborn-2-ene
Inchi:	InChI=1S/C9H12/c1-2-8-5-7-3-4-9(8)6-7/h2-4,7-9H,1,5-6H2
InchiKey:	INYHZQLKOKTDAI-UHFFFAOYSA-N
Formula:	C9H12
SMILES:	C=CC1CC2C=CC1C2
Mol. weight [g/mol]:	120.19
CAS:	3048-64-4

Physical Properties

Property code	Value	Unit	Source
chl	-5373.07 ± 0.74	kJ/mol	NIST Webbook
gf	244.39	kJ/mol	Joback Method
hf	158.80 ± 0.90	kJ/mol	NIST Webbook
hfl	116.50 ± 0.88	kJ/mol	NIST Webbook
hfus	14.25	kJ/mol	Joback Method
hvap	42.30	kJ/mol	NIST Webbook
hvap	42.30 ± 0.30	kJ/mol	NIST Webbook
hvap	42.29 ± 0.27	kJ/mol	NIST Webbook
log10ws	-2.36		Crippen Method
logp	2.385		Crippen Method
mcvol	107.350	ml/mol	McGowan Method
pc	3300.00 ± 250.00	kPa	NIST Webbook
rhoc	290.86 ± 14.42	kg/m3	NIST Webbook
rinpol	868.60		NIST Webbook
rinpol	881.00		NIST Webbook
rinpol	887.00		NIST Webbook
rinpol	864.70		NIST Webbook

rinpol	899.70		NIST Webbook
rinpol	892.70		NIST Webbook
rinpol	888.00		NIST Webbook
rinpol	881.00		NIST Webbook
rinpol	887.00		NIST Webbook
rinpol	881.00		NIST Webbook
rinpol	865.00		NIST Webbook
rinpol	867.00		NIST Webbook
rinpol	877.00		NIST Webbook
rinpol	865.00		NIST Webbook
tb	414.20	K	NIST Webbook
tc	620.00 ± 2.00	K	NIST Webbook
tf	218.31	K	Joback Method
vc	0.411	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.28	J/mol×K	585.54	Joback Method
cpg	273.51	J/mol×K	551.28	Joback Method
cpg	259.84	J/mol×K	517.02	Joback Method
cpg	245.19	J/mol×K	482.76	Joback Method
cpg	229.50	J/mol×K	448.50	Joback Method
cpg	212.72	J/mol×K	414.24	Joback Method
cpg	298.20	J/mol×K	619.79	Joback Method
dvisc	0.0004277	Pa×s	218.31	Joback Method
dvisc	0.0004967	Pa×s	414.24	Joback Method
dvisc	0.0004897	Pa×s	381.59	Joback Method
dvisc	0.0004814	Pa×s	348.93	Joback Method
dvisc	0.0004717	Pa×s	316.27	Joback Method
dvisc	0.0004600	Pa×s	283.62	Joback Method
dvisc	0.0004456	Pa×s	250.97	Joback Method
hvapt	42.00	kJ/mol	355.50	NIST Webbook
hvapt	48.90	kJ/mol	381.50	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3048644&Units=SI
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

Legend

chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rhoc:	Critical density
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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