Cyclohexane, 2-propenyl-

Other names:	Cyclohexane, allyl-
	Allylcyclohexane
	1-Cyclohexyl-2-propene
	1-Propene, 3-cyclohexyl-
	3-Cyclohexyl-1-propene
Inchi:	InChI=1S/C9H16/c1-2-6-9-7-4-3-5-8-9/h2,9H,1,3-8H2
InchiKey:	KVOZXXSUSRZIKD-UHFFFAOYSA-N
Formula:	C9H16
SMILES:	C=CCC1CCCCC1
Mol. weight [g/mol]:	124.22
CAS:	2114-42-3

Physical Properties

Property code	Value	Unit	Source
gf	137.19	kJ/mol	Joback Method
hf	-49.34	kJ/mol	Joback Method
hfus	9.62	kJ/mol	Joback Method
hvap	44.00 ± 0.30	kJ/mol	NIST Webbook
hvap	44.00 ± 0.20	kJ/mol	NIST Webbook
log10ws	-3.10		Crippen Method
logp	3.143		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2969.80	kPa	Joback Method
rinpol	919.00		NIST Webbook
rinpol	925.90		NIST Webbook
rinpol	921.00		NIST Webbook
rinpol	926.00		NIST Webbook
rinpol	919.00		NIST Webbook
rinpol	918.00		NIST Webbook
rinpol	918.00		NIST Webbook
rinpol	919.00		NIST Webbook
rinpol	935.00		NIST Webbook
rinpol	922.50		NIST Webbook
tb	422.00 ± 4.00	K	NIST Webbook
tb	400.23 ± 0.15	K	NIST Webbook
tc	624.96	K	Joback Method
tf	196.81	K	Joback Method

vc	0.454	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	239.15	J/mol×K	421.55	Joback Method
cpg	257.19	J/mol×K	455.45	Joback Method
cpg	274.31	J/mol×K	489.35	Joback Method
cpg	290.53	J/mol×K	523.25	Joback Method
cpg	305.89	J/mol×K	557.15	Joback Method
cpg	320.41	J/mol×K	591.06	Joback Method
cpg	334.12	J/mol×K	624.96	Joback Method
cpl	233.50	J/mol×K	298.15	NIST Webbook
dvisc	0.0073334	Pa×s	196.81	Joback Method
dvisc	0.0027285	Pa×s	234.27	Joback Method
dvisc	0.0013333	Pa×s	271.72	Joback Method
dvisc	0.0007750	Pa×s	309.18	Joback Method
dvisc	0.0005065	Pa×s	346.64	Joback Method
dvisc	0.0003596	Pa×s	384.09	Joback Method
dvisc	0.0002714	Pa×s	421.55	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2114423&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Legend

cpg: Ideal gas heat capacity
cpl: Liquid phase 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