Cyclopentane, (2-methyl-1-propenyl)-

Inchi: InChI=1S/C9H16/c1-8(2)7-9-5-3-4-6-9/h7,9H,3-6H2,1-2H3
InchiKey: WDTAVCCCNFJLPC-UHFFFAOYSA-N
Formula: C9H16
SMILES: CC(C)=CC1CCCC1
Mol. weight [g/mol]: 124.22
CAS: 53366-57-7

Physical Properties

Property code	Value	Unit	Source
gf	133.12	kJ/mol	Joback Method
hf	-61.18	kJ/mol	Joback Method
hfus	11.89	kJ/mol	Joback Method
hvap	35.92	kJ/mol	Joback Method
log10ws	-3.10		Crippen Method
logp	3.143		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2937.70	kPa	Joback Method
rinpol	895.00		NIST Webbook
rinpol	892.00		NIST Webbook
rinpol	898.00		NIST Webbook
rinpol	895.00		NIST Webbook
tb	424.64	K	Joback Method
tc	629.75	K	Joback Method
tf	183.05	K	Joback Method
vc	0.462	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	241.07	J/mol×K	424.64	Joback Method
cpg	258.79	J/mol×K	458.82	Joback Method
cpg	275.52	J/mol×K	493.01	Joback Method
cpg	291.30	J/mol×K	527.19	Joback Method
cpg	306.17	J/mol×K	561.38	Joback Method

cpg	320.18	J/mol×K	595.56	Joback Method
cpg	333.38	J/mol×K	629.75	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=C53366577&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
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