Cyclopentane, (2-methylpropylidene)-

Inchi: InChI=1S/C9H16/c1-8(2)7-9-5-3-4-6-9/h7-8H,3-6H2,1-2H3
InchiKey: DEZUGIRFUVKPNW-UHFFFAOYSA-N
Formula: C9H16
SMILES: CC(C)C=C1CCCC1
Mol. weight [g/mol]: 124.22
CAS: 53366-58-8

Physical Properties

Property code	Value	Unit	Source
gf	112.18	kJ/mol	Joback Method
hf	-77.52	kJ/mol	Joback Method
hfus	8.73	kJ/mol	Joback Method
hvap	36.59	kJ/mol	Joback Method
log10ws	-3.10		Crippen Method
logp	3.143		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2979.54	kPa	Joback Method
rinpol	920.00		NIST Webbook
rinpol	917.00		NIST Webbook
rinpol	922.00		NIST Webbook
rinpol	917.00		NIST Webbook
rinpol	917.00		NIST Webbook
tb	431.47	K	Joback Method
tc	635.09	K	Joback Method
tf	201.69	K	Joback Method
vc	0.459	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	243.32	J/mol×K	431.47	Joback Method
cpg	259.89	J/mol×K	465.41	Joback Method
cpg	275.55	J/mol×K	499.34	Joback Method
cpg	290.35	J/mol×K	533.28	Joback Method

cpg	304.33	J/mol×K	567.21	Joback Method
cpg	317.51	J/mol×K	601.15	Joback Method
cpg	329.96	J/mol×K	635.09	Joback Method
dvisc	0.0068150	Pa×s	201.69	Joback Method
dvisc	0.0025483	Pa×s	239.99	Joback Method
dvisc	0.0012492	Pa×s	278.28	Joback Method
dvisc	0.0007276	Pa×s	316.58	Joback Method
dvisc	0.0004763	Pa×s	354.88	Joback Method
dvisc	0.0003386	Pa×s	393.17	Joback Method
dvisc	0.0002557	Pa×s	431.47	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=C53366588&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

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