3-Butenylcyclopentane

Inchi: InChI=1S/C9H16/c1-2-3-6-9-7-4-5-8-9/h2,9H,1,3-8H2
InchiKey: AAAVTDCFEWFTIY-UHFFFAOYSA-N
Formula: C9H16
SMILES: C=CCCC1CCCC1
Mol. weight [g/mol]: 124.22

Physical Properties

Property code	Value	Unit	Source
gf	149.29	kJ/mol	Joback Method
hf	-43.18	kJ/mol	Joback Method
hfus	11.72	kJ/mol	Joback Method
hvap	35.22	kJ/mol	Joback Method
log10ws	-3.10		Crippen Method
logp	3.143		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2890.51	kPa	Joback Method
rinpol	927.00		NIST Webbook
tb	417.28	K	Joback Method
tc	612.60	K	Joback Method
tf	200.33	K	Joback Method
vc	0.462	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	240.03	J/mol×K	417.28	Joback Method
cpg	316.70	J/mol×K	580.05	Joback Method
cpg	302.98	J/mol×K	547.49	Joback Method
cpg	288.48	J/mol×K	514.94	Joback Method
cpg	273.18	J/mol×K	482.39	Joback Method
cpg	257.04	J/mol×K	449.83	Joback Method
cpg	329.68	J/mol×K	612.60	Joback Method
dvisc	0.0003051	Pa×s	417.28	Joback Method
dvisc	0.0003834	Pa×s	381.12	Joback Method

dvisc	0.0005052	Pa×s	344.96	Joback Method
dvisc	0.0007103	Pa×s	308.80	Joback Method
dvisc	0.0010930	Pa×s	272.65	Joback Method
dvisc	0.0019188	Pa×s	236.49	Joback Method
dvisc	0.0041276	Pa×s	200.33	Joback Method

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R388935&Units=SI

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