Cyclopentane, butylidene

Inchi: InChI=1S/C9H16/c1-2-3-6-9-7-4-5-8-9/h6H,2-5,7-8H2,1H3
InchiKey: SFOPXUUMZRCYNJ-UHFFFAOYSA-N
Formula: C9H16
SMILES: CCCC=C1CCCC1
Mol. weight [g/mol]: 124.22

Physical Properties

Property code	Value	Unit	Source
gf	114.62	kJ/mol	Joback Method
hf	-72.24	kJ/mol	Joback Method
hfus	12.25	kJ/mol	Joback Method
hvap	36.98	kJ/mol	Joback Method
log10ws	-3.34		Crippen Method
logp	3.287		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2953.69	kPa	Joback Method
rinpol	946.00		NIST Webbook
rinpol	949.00		NIST Webbook
tb	431.91	K	Joback Method
tc	630.76	K	Joback Method
tf	216.69	K	Joback Method
vc	0.465	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	243.31	J/mol×K	431.91	Joback Method
cpg	259.39	J/mol×K	465.05	Joback Method
cpg	274.62	J/mol×K	498.19	Joback Method
cpg	289.04	J/mol×K	531.33	Joback Method
cpg	302.68	J/mol×K	564.48	Joback Method
cpg	315.57	J/mol×K	597.62	Joback Method
cpg	327.76	J/mol×K	630.76	Joback Method
dvisc	0.0042711	Pa×s	216.69	Joback Method

dvisc	0.0019383	Pa×s	252.56	Joback Method
dvisc	0.0010706	Pa×s	288.43	Joback Method
dvisc	0.0006743	Pa×s	324.30	Joback Method
dvisc	0.0004657	Pa×s	360.17	Joback Method
dvisc	0.0003439	Pa×s	396.04	Joback Method
dvisc	0.0002671	Pa×s	431.91	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R10753&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
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