3-methyl-1-(1-methylethyl)cyclopentene

Inchi: InChI=1S/C9H16/c1-7(2)9-5-4-8(3)6-9/h6-8H,4-5H2,1-3H3
InchiKey: ACQWMMUVHAXRPF-UHFFFAOYSA-N
Formula: C9H16
SMILES: CC1C=C(C(C)C)CC1
Mol. weight [g/mol]: 124.22
CAS: 51115-02-7

Physical Properties

Property code	Value	Unit	Source
gf	79.34	kJ/mol	Joback Method
hf	-127.58	kJ/mol	Joback Method
hfus	10.31	kJ/mol	Joback Method
hvap	36.45	kJ/mol	Joback Method
log10ws	-2.85		Crippen Method
logp	2.999		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2850.52	kPa	Joback Method
rinpol	933.20		NIST Webbook
rinpol	933.20		NIST Webbook
tb	424.30	K	Joback Method
tc	623.45	K	Joback Method
tf	200.37	K	Joback Method
vc	0.461	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	244.12	J/mol×K	424.30	Joback Method
cpg	260.45	J/mol×K	457.49	Joback Method
cpg	275.99	J/mol×K	490.68	Joback Method
cpg	290.76	J/mol×K	523.87	Joback Method
cpg	304.79	J/mol×K	557.06	Joback Method
cpg	318.10	J/mol×K	590.26	Joback Method
cpg	330.71	J/mol×K	623.45	Joback Method

dvisc	0.0033599	Pa×s	200.37	Joback Method
dvisc	0.0015840	Pa×s	237.69	Joback Method
dvisc	0.0009158	Pa×s	275.01	Joback Method
dvisc	0.0006036	Pa×s	312.33	Joback Method
dvisc	0.0004348	Pa×s	349.66	Joback Method
dvisc	0.0003337	Pa×s	386.98	Joback Method
dvisc	0.0002683	Pa×s	424.30	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=C51115027&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