

Cyclopentene, 1-methyl-4-(1-methylethyl)

Inchi:	InChI=1S/C9H16/c1-7(2)9-5-4-8(3)6-9/h4,7,9H,5-6H2,1-3H3
InchiKey:	KBKZDZOQXUMEJU-UHFFFAOYSA-N
Formula:	C9H16
SMILES:	CC1=CCC(C(C)C)C1
Mol. weight [g/mol]:	124.22
CAS:	90769-70-3

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
rinpola	872.00		NIST Webbook
tb	424.30	K	Joback Method
tc	623.45	K	Joback Method
tf	200.37	K	Joback Method
vc	0.461	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	244.12	J/molxK	424.30	Joback Method
cpg	260.45	J/molxK	457.49	Joback Method
cpg	275.99	J/molxK	490.68	Joback Method
cpg	290.76	J/molxK	523.87	Joback Method
cpg	304.79	J/molxK	557.06	Joback Method
cpg	318.10	J/molxK	590.26	Joback Method
cpg	330.71	J/molxK	623.45	Joback Method
dvisc	0.0033599	Paxs	200.37	Joback Method

dvisc	0.0015840	Paxs	237.69	Joback Method
dvisc	0.0009158	Paxs	275.01	Joback Method
dvisc	0.0006036	Paxs	312.33	Joback Method
dvisc	0.0004348	Paxs	349.66	Joback Method
dvisc	0.0003337	Paxs	386.98	Joback Method
dvisc	0.0002683	Paxs	424.30	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=C90769703&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	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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