Carvomenthene oxide

Other names: p-Menth-1-ene oxide
Inchi: InChI=1S/C10H18O/c1-7(2)8-4-5-10(3)9(6-8)11-10/h7-9H,4-6H2,1-3H3
InchiKey: WSHVHJSDSVPPIV-UHFFFAOYSA-N
Formula: C10H18O
SMILES: CC(C)C1CCC2(C)OC2C1
Mol. weight [g/mol]: 154.25

Physical Properties

Property code	Value	Unit	Source
gf	40.96	kJ/mol	Joback Method
hf	-252.67	kJ/mol	Joback Method
hfus	15.05	kJ/mol	Joback Method
hvap	40.51	kJ/mol	Joback Method
log10ws	-2.63		Crippen Method
logp	2.600		Crippen Method
mcvol	135.910	ml/mol	McGowan Method
pc	2823.32	kPa	Joback Method
rinpol	1127.00		NIST Webbook
rinpol	1131.00		NIST Webbook
rinpol	1127.00		NIST Webbook
tb	468.03	K	Joback Method
tc	677.82	K	Joback Method
tf	266.05	K	Joback Method
vc	0.513	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	321.17	J/mol×K	468.03	Joback Method
cpg	340.52	J/mol×K	502.99	Joback Method
cpg	358.49	J/mol×K	537.96	Joback Method
cpg	375.19	J/mol×K	572.92	Joback Method
cpg	390.78	J/mol×K	607.89	Joback Method
cpg	405.39	J/mol×K	642.85	Joback Method

cpg	419.16	J/mol×K	677.82	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=R120160&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
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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