p-Mentha-1,8(10)-dien-3,9-oxide

Other names: 3,9-Oxy-mentha-1,8(10)-diene
Inchi: InChI=1S/C10H14O/c1-7-3-4-9-8(2)6-11-10(9)5-7/h5,9-10H,2-4,6H2,1H3
InchiKey: FQRAKZWEBJPGTM-UHFFFAOYSA-N
Formula: C10H14O
SMILES: C=C1COC2C=C(C)CCC12
Mol. weight [g/mol]: 150.22

Physical Properties

Property code	Value	Unit	Source
gf	105.81	kJ/mol	Joback Method
hf	-124.06	kJ/mol	Joback Method
hfus	19.28	kJ/mol	Joback Method
hvap	43.82	kJ/mol	Joback Method
log10ws	-2.46		Crippen Method
logp	2.298		Crippen Method
mcvol	127.310	ml/mol	McGowan Method
pc	3045.68	kPa	Joback Method
rinpol	1182.00		NIST Webbook
rinpol	1182.00		NIST Webbook
rinpol	1168.00		NIST Webbook
ripol	1551.00		NIST Webbook
tb	484.74	K	Joback Method
tc	702.52	K	Joback Method
tf	281.31	K	Joback Method
vc	0.476	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	288.66	J/mol×K	484.74	Joback Method
cpg	364.53	J/mol×K	666.23	Joback Method
cpg	351.22	J/mol×K	629.93	Joback Method
cpg	337.02	J/mol×K	593.63	Joback Method
cpg	321.90	J/mol×K	557.33	Joback Method

cpg	305.79	J/mol×K	521.04	Joback Method
cpg	377.00	J/mol×K	702.52	Joback Method
dvisc	0.0005285	Pa×s	484.74	Joback Method
dvisc	0.0005972	Pa×s	450.83	Joback Method
dvisc	0.0006884	Pa×s	416.93	Joback Method
dvisc	0.0008138	Pa×s	383.02	Joback Method
dvisc	0.0009937	Pa×s	349.12	Joback Method
dvisc	0.0012667	Pa×s	315.21	Joback Method
dvisc	0.0017120	Pa×s	281.31	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=R325216&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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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