«DELTA»2-menthene oxide

Inchi: InChI=1S/C10H18O/c1-6(2)8-5-4-7(3)9-10(8)11-9/h6-10H,4-5H2,1-3H3
InchiKey: DVDWHWOVXBYPFH-UHFFFAOYSA-N
Formula: C10H18O
SMILES: CC(C)C1CCC(C)C2OC12
Mol. weight [g/mol]: 154.25

Physical Properties

Property code	Value	Unit	Source
gf	38.74	kJ/mol	Joback Method
hf	-288.25	kJ/mol	Joback Method
hfus	22.42	kJ/mol	Joback Method
hvap	41.36	kJ/mol	Joback Method
log10ws	-2.38		Crippen Method
logp	2.456		Crippen Method
mcvol	135.910	ml/mol	McGowan Method
pc	2603.08	kPa	Joback Method
rinpol	1134.00		NIST Webbook
rinpol	1143.00		NIST Webbook
ripol	1412.00		NIST Webbook
ripol	1393.00		NIST Webbook
ripol	1393.00		NIST Webbook
tb	463.12	K	Joback Method
tc	663.84	K	Joback Method
tf	237.91	K	Joback Method
vc	0.514	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	320.51	J/mol×K	463.12	Joback Method
cpg	407.45	J/mol×K	630.38	Joback Method
cpg	392.01	J/mol×K	596.93	Joback Method
cpg	375.65	J/mol×K	563.48	Joback Method
cpg	358.31	J/mol×K	530.03	Joback Method

cpg	339.95	J/mol×K	496.57	Joback Method
cpg	422.00	J/mol×K	663.84	Joback Method
dvisc	0.0007173	Pa×s	463.12	Joback Method
dvisc	0.0007456	Pa×s	425.59	Joback Method
dvisc	0.0007808	Pa×s	388.05	Joback Method
dvisc	0.0008258	Pa×s	350.51	Joback Method
dvisc	0.0008852	Pa×s	312.98	Joback Method
dvisc	0.0009670	Pa×s	275.45	Joback Method
dvisc	0.0010863	Pa×s	237.91	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=R339245&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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