1-p-Menthen-9-al, isomer 1

Inchi: InChI=1S/C10H16O/c1-8-3-5-10(6-4-8)9(2)7-11/h3,7,9-10H,4-6H2,1-2H3
InchiKey: UMEJBWOWZDRULR-UHFFFAOYSA-N
Formula: C10H16O
SMILES: CC1=CCC(C(C)C=O)CC1
Mol. weight [g/mol]: 152.23

Physical Properties

Property code	Value	Unit	Source
gf	-23.86	kJ/mol	Joback Method
hf	-239.96	kJ/mol	Joback Method
hfus	13.09	kJ/mol	Joback Method
hvap	45.57	kJ/mol	Joback Method
log10ws	-2.55		Crippen Method
logp	2.568		Crippen Method
mcvol	138.170	ml/mol	McGowan Method
pc	2859.68	kPa	Joback Method
rinpol	1221.00		NIST Webbook
tb	500.11	K	Joback Method
tc	710.00	K	Joback Method
tf	250.12	K	Joback Method
vc	0.525	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	312.82	J/mol×K	500.11	Joback Method
cpg	388.15	J/mol×K	675.02	Joback Method
cpg	374.78	J/mol×K	640.04	Joback Method
cpg	360.59	J/mol×K	605.06	Joback Method
cpg	345.55	J/mol×K	570.07	Joback Method
cpg	329.63	J/mol×K	535.09	Joback Method
cpg	400.72	J/mol×K	710.00	Joback Method
dvisc	0.0002874	Pa×s	500.11	Joback Method
dvisc	0.0003747	Pa×s	458.44	Joback Method

dvisc	0.0005151	Pa×s	416.78	Joback Method
dvisc	0.0007601	Pa×s	375.12	Joback Method
dvisc	0.0012360	Pa×s	333.45	Joback Method
dvisc	0.0023094	Pa×s	291.78	Joback Method
dvisc	0.0053140	Pa×s	250.12	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=R617055&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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