2-(3-methyl-2-cyclopenten-1-yl)-2-methylpropiona

Inchi: InChI=1S/C10H16O/c1-8-4-5-9(6-8)10(2,3)7-11/h6-7,9H,4-5H2,1-3H3
InchiKey: SVDLNNVLBMXPTF-UHFFFAOYSA-N
Formula: C10H16O
SMILES: CC1=CC(C(C)(C)C=O)CC1
Mol. weight [g/mol]: 152.23

Physical Properties

Property code	Value	Unit	Source
gf	-6.48	kJ/mol	Joback Method
hf	-237.27	kJ/mol	Joback Method
hfus	11.30	kJ/mol	Joback Method
hvap	44.49	kJ/mol	Joback Method
log10ws	-2.55		Crippen Method
logp	2.568		Crippen Method
mcvol	138.170	ml/mol	McGowan Method
pc	2817.33	kPa	Joback Method
ripol	1442.00		NIST Webbook
tb	493.05	K	Joback Method
tc	703.76	K	Joback Method
tf	271.06	K	Joback Method
vc	0.528	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	315.50	J/mol×K	493.05	Joback Method
cpg	332.21	J/mol×K	528.17	Joback Method
cpg	347.88	J/mol×K	563.29	Joback Method
cpg	362.56	J/mol×K	598.41	Joback Method
cpg	376.31	J/mol×K	633.52	Joback Method
cpg	389.17	J/mol×K	668.64	Joback Method
cpg	401.19	J/mol×K	703.76	Joback Method
dvisc	0.0039717	Pa×s	271.06	Joback Method
dvisc	0.0020900	Pa×s	308.06	Joback Method

dvisc	0.0012621	Pa×s	345.06	Joback Method
dvisc	0.0008404	Pa×s	382.06	Joback Method
dvisc	0.0006012	Pa×s	419.05	Joback Method
dvisc	0.0004541	Pa×s	456.05	Joback Method
dvisc	0.0003578	Pa×s	493.05	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U365940&Units=SI
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

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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