Acetic acid, cyclohexylidene-, ethyl ester

Other names:	«delta»1,«alpha»-Cyclohexaneacetic acid, ethyl ester
	Ethyl cyclohexylideneacetate
	Ethoxycarbonylmethylenecyclohexane
Inchi:	InChI=1S/C10H16O2/c1-2-12-10(11)8-9-6-4-3-5-7-9/h8H,2-7H2,1H3
InchiKey:	MCWDXHYYYNGYGK-UHFFFAOYSA-N
Formula:	C10H16O2
SMILES:	CCOC(=O)C=C1CCCCC1
Mol. weight [g/mol]:	168.23
CAS:	1552-92-7

Physical Properties

Property code	Value	Unit	Source
gf	-122.98	kJ/mol	Joback Method
hf	-343.84	kJ/mol	Joback Method
hfus	15.53	kJ/mol	Joback Method
hvap	48.53	kJ/mol	Joback Method
log10ws	-2.62		Crippen Method
logp	2.440		Crippen Method
mcvol	144.040	ml/mol	McGowan Method
pc	2875.03	kPa	Joback Method
tb	535.35	K	Joback Method
tc	747.70	K	Joback Method
tf	296.60	K	Joback Method
vc	0.536	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	336.78	J/mol×K	535.35	Joback Method
cpg	353.12	J/mol×K	570.74	Joback Method
cpg	368.57	J/mol×K	606.13	Joback Method
cpg	383.15	J/mol×K	641.52	Joback Method
cpg	396.90	J/mol×K	676.91	Joback Method
cpg	409.82	J/mol×K	712.30	Joback Method

cpg	421.95	J/mol×K	747.70	Joback Method
dvisc	0.0033197	Pa×s	296.60	Joback Method
dvisc	0.0015677	Pa×s	336.39	Joback Method
dvisc	0.0008677	Pa×s	376.18	Joback Method
dvisc	0.0005378	Pa×s	415.98	Joback Method
dvisc	0.0003623	Pa×s	455.77	Joback Method
dvisc	0.0002601	Pa×s	495.56	Joback Method
dvisc	0.0001962	Pa×s	535.35	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=C1552927&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume