Acetic acid, iodo-

Other names:	Iodoacetic acid
	Monoiodoacetic acid
	MIA
	CH2ICOOH
	IA
	Kyselina jodoctova
Inchi:	InChI=1S/C2H3IO2/c3-1-2(4)5/h1H2,(H,4,5)
InchiKey:	JDNTWHVOXJZDSN-UHFFFAOYSA-N
Formula:	C2H3IO2
SMILES:	O=C(O)CI
Mol. weight [g/mol]:	185.95
CAS:	64-69-7

Physical Properties

Property code	Value	Unit	Source
gf	-241.66	kJ/mol	Joback Method
hf	-272.55	kJ/mol	Joback Method
hfus	11.03	kJ/mol	Joback Method
hsub	86.50 ± 1.00	kJ/mol	NIST Webbook
hvap	52.84	kJ/mol	Joback Method
ie	9.60	eV	NIST Webbook
ie	11.03	eV	NIST Webbook
log10ws	-0.71		Crippen Method
logp	0.506		Crippen Method
mcvol	72.300	ml/mol	McGowan Method
pc	6132.23	kPa	Joback Method
tb	484.35	K	Joback Method
tc	693.92	K	Joback Method
tf	281.11	K	Joback Method
vc	0.261	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	105.34	J/mol×K	484.35	Joback Method
cpg	108.85	J/mol×K	519.28	Joback Method
cpg	112.12	J/mol×K	554.21	Joback Method
cpg	115.17	J/mol×K	589.14	Joback Method
cpg	118.02	J/mol×K	624.07	Joback Method
cpg	120.68	J/mol×K	658.99	Joback Method
cpg	123.16	J/mol×K	693.92	Joback Method
dvisc	0.0229367	Pa×s	281.11	Joback Method
dvisc	0.0077986	Pa×s	314.98	Joback Method
dvisc	0.0032696	Pa×s	348.86	Joback Method
dvisc	0.0015988	Pa×s	382.73	Joback Method
dvisc	0.0008782	Pa×s	416.60	Joback Method
dvisc	0.0005279	Pa×s	450.48	Joback Method
dvisc	0.0003407	Pa×s	484.35	Joback Method
hfust	15.50	kJ/mol	355.10	NIST Webbook

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=C64697&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
hfust: Enthalpy of fusion at a given temperature
hsub: Enthalpy of sublimation at standard conditions
hvap: Enthalpy of vaporization at standard conditions
ie: Ionization energy
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