Iodoacetamide

Other names:	2-Iodoacetamide
	«alpha»-Iodoacetamide
	Acetamide, 2-iodo-
	Monoiodoacetamide
	Surauto
	USAF d-1
	Alpha-iodo acetamide
Inchi:	InChI=1S/C2H4INO/c3-1-2(4)5/h1H2,(H2,4,5)
InchiKey:	PGLTVOMIXTUURA-UHFFFAOYSA-N
Formula:	C2H4INO
SMILES:	NC(=O)CI
Mol. weight [g/mol]:	184.96
CAS:	144-48-9

Physical Properties

Property code	Value	Unit	Source
gf	-38.39	kJ/mol	Joback Method
hf	-86.53	kJ/mol	Joback Method
hfus	12.14	kJ/mol	Joback Method
hvap	46.81	kJ/mol	Joback Method
log10ws	-0.82		Crippen Method
logp	-0.093		Crippen Method
mcvol	76.410	ml/mol	McGowan Method
pc	5809.41	kPa	Joback Method
tb	464.70	K	Joback Method
tc	702.84	K	Joback Method
tf	303.55	K	Joback Method
vc	0.271	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	114.74	J/mol×K	464.70	Joback Method
cpg	119.50	J/mol×K	504.39	Joback Method

cpg	123.92	J/mol×K	544.08	Joback Method
cpg	128.01	J/mol×K	583.77	Joback Method
cpg	131.80	J/mol×K	623.46	Joback Method
cpg	135.32	J/mol×K	663.15	Joback Method
cpg	138.57	J/mol×K	702.84	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=C144489&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
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