Ethane, 1-chloro-2-iodo-

Other names: 1-Chloro-2-iodoethane
1,2-Chloroiodoethane
Inchi: InChI=1S/C2H4ClI/c3-1-2-4/h1-2H2
InchiKey: JTWWWQGSFTWWDL-UHFFFAOYSA-N
Formula: C2H4ClI
SMILES: ClCCI
Mol. weight [g/mol]: 190.41
CAS: 624-70-4

Physical Properties

Property code	Value	Unit	Source
gf	12.15	kJ/mol	Joback Method
hf	-47.70 ± 5.00	kJ/mol	NIST Webbook
hfus	9.54	kJ/mol	Joback Method
hvap	33.80	kJ/mol	Joback Method
log10ws	-1.76		Crippen Method
logp	1.660		Crippen Method
mcvol	77.100	ml/mol	McGowan Method
pc	4634.00	kPa	Joback Method
tb	375.73	K	Joback Method
tc	592.51	K	Joback Method
tf	200.28	K	Joback Method
vc	0.284	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	92.57	J/mol×K	375.73	Joback Method
cpg	96.94	J/mol×K	411.86	Joback Method
cpg	101.03	J/mol×K	447.99	Joback Method
cpg	104.84	J/mol×K	484.12	Joback Method
cpg	108.40	J/mol×K	520.25	Joback Method
cpg	111.73	J/mol×K	556.38	Joback Method
cpg	114.83	J/mol×K	592.51	Joback Method

dvisc	0.0051514	Pa×s	200.28	Joback Method
dvisc	0.0026830	Pa×s	229.52	Joback Method
dvisc	0.0016193	Pa×s	258.76	Joback Method
dvisc	0.0010829	Pa×s	288.00	Joback Method
dvisc	0.0007799	Pa×s	317.25	Joback Method
dvisc	0.0005937	Pa×s	346.49	Joback Method
dvisc	0.0004716	Pa×s	375.73	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=C624704&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