Chloroiodomethane

Other names: Methane, chloroiodo-
Inchi: InChI=1S/CH2ClI/c2-1-3/h1H2
InchiKey: PJGJQVRXEUVAFT-UHFFFAOYSA-N
Formula: CH2ClI
SMILES: ClCI
Mol. weight [g/mol]: 176.38
CAS: 593-71-5

Physical Properties

Property code	Value	Unit	Source
gf	3.73	kJ/mol	Joback Method
hf	-2.84	kJ/mol	Joback Method
hfus	6.95	kJ/mol	Joback Method
hvap	31.58	kJ/mol	Joback Method
log10ws	-1.84		Crippen Method
logp	1.618		Crippen Method
mcvol	63.010	ml/mol	McGowan Method
pc	5304.68	kPa	Joback Method
rinpol	712.00		NIST Webbook
rinpol	704.00		NIST Webbook
rinpol	718.00		NIST Webbook
ripol	1224.48		NIST Webbook
ripol	1212.53		NIST Webbook
ripol	1231.23		NIST Webbook
tb	352.85	K	Joback Method
tc	571.30	K	Joback Method
tf	189.01	K	Joback Method
vc	0.229	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	63.28	J/mol×K	352.85	Joback Method
cpg	65.71	J/mol×K	389.26	Joback Method

cpg	67.95	J/mol×K	425.67	Joback Method
cpg	70.00	J/mol×K	462.08	Joback Method
cpg	71.89	J/mol×K	498.49	Joback Method
cpg	73.62	J/mol×K	534.89	Joback Method
cpg	75.21	J/mol×K	571.30	Joback Method
dvisc	0.0048013	Pa×s	189.01	Joback Method
dvisc	0.0025776	Pa×s	216.32	Joback Method
dvisc	0.0015909	Pa×s	243.62	Joback Method
dvisc	0.0010822	Pa×s	270.93	Joback Method
dvisc	0.0007900	Pa×s	298.24	Joback Method
dvisc	0.0006079	Pa×s	325.54	Joback Method
dvisc	0.0004872	Pa×s	352.85	Joback Method

Sources

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=C593715&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point

vc: Critical Volume