Methane, chlorodiiodo-

Other names: Chlorodiiodomethane
Inchi: InChI=1S/CHClI2/c2-1(3)4/h1H
InchiKey: RYPFDEIVUZVDCE-UHFFFAOYSA-N
Formula: CHClI2
SMILES: ClC(I)I
Mol. weight [g/mol]: 302.28
CAS: 638-73-3

Physical Properties

Property code	Value	Unit	Source
gf	59.41	kJ/mol	Joback Method
hf	68.75	kJ/mol	Joback Method
hfus	7.83	kJ/mol	Joback Method
hvap	40.56	kJ/mol	Joback Method
log10ws	-3.39		Crippen Method
logp	2.379		Crippen Method
mcvol	88.830	ml/mol	McGowan Method
pc	5198.13	kPa	Joback Method
tb	445.55	K	Joback Method
tc	716.96	K	Joback Method
tf	232.07	K	Joback Method
vc	0.310	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	85.80	J/mol×K	445.55	Joback Method
cpg	87.83	J/mol×K	490.79	Joback Method
cpg	89.50	J/mol×K	536.02	Joback Method
cpg	90.88	J/mol×K	581.26	Joback Method
cpg	92.00	J/mol×K	626.49	Joback Method
cpg	92.92	J/mol×K	671.73	Joback Method
cpg	93.69	J/mol×K	716.96	Joback Method
dvisc	0.0077662	Pa×s	232.07	Joback Method

dvisc	0.0036365	Pa×s	267.65	Joback Method
dvisc	0.0020347	Pa×s	303.23	Joback Method
dvisc	0.0012861	Pa×s	338.81	Joback Method
dvisc	0.0008870	Pa×s	374.39	Joback Method
dvisc	0.0006525	Pa×s	409.97	Joback Method
dvisc	0.0005041	Pa×s	445.55	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C638733&Units=SI

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