Methane, trichloroiodo-

Inchi: InChI=1S/CCl3I/c2-1(3,4)5
InchiKey: SFLKZLQXODICBP-UHFFFAOYSA-N
Formula: CCl3I
SMILES: ClC(Cl)(Cl)I
Mol. weight [g/mol]: 245.27
CAS: 594-22-9

Physical Properties

Property code	Value	Unit	Source
gf	-17.29	kJ/mol	Joback Method
hf	-43.07	kJ/mol	Joback Method
hfus	7.93	kJ/mol	Joback Method
hvap	39.05	kJ/mol	Joback Method
log10ws	-3.25		Crippen Method
logp	2.749		Crippen Method
mcvol	87.490	ml/mol	McGowan Method
pc	4903.92	kPa	Joback Method
tb	424.48	K	Joback Method
tc	678.73	K	Joback Method
tf	251.27	K	Joback Method
vc	0.316	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	96.93	J/mol×K	424.48	Joback Method
cpg	104.84	J/mol×K	636.36	Joback Method
cpg	104.07	J/mol×K	593.98	Joback Method
cpg	102.97	J/mol×K	551.61	Joback Method
cpg	101.45	J/mol×K	509.23	Joback Method
cpg	99.46	J/mol×K	466.86	Joback Method
cpg	105.31	J/mol×K	678.73	Joback Method
dvisc	0.0005583	Pa×s	424.48	Joback Method
dvisc	0.0007243	Pa×s	395.61	Joback Method

dvisc	0.0009790	Pa×s	366.74	Joback Method
dvisc	0.0013932	Pa×s	337.88	Joback Method
dvisc	0.0021178	Pa×s	309.01	Joback Method
dvisc	0.0035095	Pa×s	280.14	Joback Method
dvisc	0.0065312	Pa×s	251.27	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=C594229&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume