

Ethene, tetraiodo-

Other names:	Ethylene, tetraiodo- Ethylene periodide Ethylene tetraiodide Periodoethene Tetraiodoethylene
Inchi:	InChI=1S/C2I4/c3-1(4)2(5)6
InchiKey:	ZGQURDGVBSDFN-UHFFFAOYSA-N
Formula:	C2I4
SMILES:	IC(I)=C(I)I
Mol. weight [g/mol]:	531.64
CAS:	513-92-8

Physical Properties

Property code	Value	Unit	Source
gf	261.56	kJ/mol	Joback Method
hf	320.51	kJ/mol	Joback Method
hfus	16.14	kJ/mol	Joback Method
hvap	57.66	kJ/mol	Joback Method
ie	8.60	eV	NIST Webbook
ie	8.50	eV	NIST Webbook
ie	8.65 ± 0.02	eV	NIST Webbook
ie	8.30	eV	NIST Webbook
ie	8.52	eV	NIST Webbook
log10ws	-6.29		Crippen Method
logp	3.853		Crippen Method
mcpvol	138.020	ml/mol	McGowan Method
pc	4849.43	kPa	Joback Method
tb	621.64	K	Joback Method
tc	986.31	K	Joback Method
tf	311.54	K	Joback Method
vc	0.481	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	124.81	J/mol×K	621.64	Joback Method
cpg	125.04	J/mol×K	682.42	Joback Method
cpg	124.96	J/mol×K	743.20	Joback Method
cpg	124.87	J/mol×K	803.97	Joback Method
cpg	125.07	J/mol×K	864.75	Joback Method
cpg	125.86	J/mol×K	925.53	Joback Method
cpg	127.54	J/mol×K	986.31	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=C513928&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
ie:	Ionization energy
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

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<https://www.chemeo.com/cid/71-018-3/Ethene-tetraiodo.pdf>

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