Ethane, tetrachloro-

Other names: tetrachloroethane
Inchi: InChI=1S/C2H2Cl4/c3-1(4)2(5)6/h1-2H
InchiKey: QPFMBZIOSGYJDE-UHFFFAOYSA-N
Formula: C2H2Cl4
SMILES: ClC(Cl)C(Cl)Cl
Mol. weight [g/mol]: 167.85
CAS: 25322-20-7

Physical Properties

Property code	Value	Unit	Source
gf	-86.64	kJ/mol	Joback Method
hf	-158.13	kJ/mol	Joback Method
hfus	10.68	kJ/mol	Joback Method
hvap	36.81	kJ/mol	Joback Method
log10ws	-2.49		Crippen Method
logp	2.594		Crippen Method
mcvol	88.000	ml/mol	McGowan Method
pc	4205.63	kPa	Joback Method
tb	394.00	K	Joback Method
tc	605.61	K	Joback Method
tf	201.98	K	Joback Method
vc	0.332	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	117.05	J/mol×K	394.00	Joback Method
cpg	121.09	J/mol×K	429.27	Joback Method
cpg	124.85	J/mol×K	464.54	Joback Method
cpg	128.35	J/mol×K	499.80	Joback Method
cpg	131.60	J/mol×K	535.07	Joback Method
cpg	134.60	J/mol×K	570.34	Joback Method
cpg	137.38	J/mol×K	605.61	Joback Method
dvisc	0.0088772	Pa×s	201.98	Joback Method

dvisc	0.0037828	Pa×s	233.98	Joback Method
dvisc	0.0019792	Pa×s	265.99	Joback Method
dvisc	0.0011902	Pa×s	297.99	Joback Method
dvisc	0.0007899	Pa×s	329.99	Joback Method
dvisc	0.0005636	Pa×s	362.00	Joback Method
dvisc	0.0004249	Pa×s	394.00	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=C25322207&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