2-Propanone, 1,1,3,3-tetrachloro-

Other names:	1,1,3,3-Tetrachloroacetone
	TCA
	1,1,3,3-Tetrachloropropanone
	1,1,3,3-Tetrachloro-2-propanone
Inchi:	InChI=1S/C3H2Cl4O/c4-2(5)1(8)3(6)7/h2-3H
InchiKey:	DJWVKJAGMVZYFP-UHFFFAOYSA-N
Formula:	C3H2Cl4O
SMILES:	O=C(C(Cl)Cl)C(Cl)Cl
Mol. weight [g/mol]:	195.86
CAS:	632-21-3

Physical Properties

Property code	Value	Unit	Source
gf	-207.14	kJ/mol	Joback Method
hf	-291.35	kJ/mol	Joback Method
hfus	14.87	kJ/mol	Joback Method
hvap	45.78	kJ/mol	Joback Method
log10ws	-2.18		Crippen Method
logp	2.163		Crippen Method
mcvol	103.660	ml/mol	McGowan Method
pc	4031.24	kPa	Joback Method
rinpol	999.00		NIST Webbook
tb	470.75	K	Joback Method
tc	692.15	K	Joback Method
tf	263.18	K	Joback Method
vc	0.394	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	155.87	J/mol×K	470.75	Joback Method
cpg	160.73	J/mol×K	507.65	Joback Method
cpg	165.24	J/mol×K	544.55	Joback Method
cpg	169.40	J/mol×K	581.45	Joback Method

cpg	173.23	J/mol×K	618.35	Joback Method
cpg	176.75	J/mol×K	655.25	Joback Method
cpg	179.98	J/mol×K	692.15	Joback Method
dvisc	0.0062386	Pa×s	263.18	Joback Method
dvisc	0.0030785	Pa×s	297.77	Joback Method
dvisc	0.0017597	Pa×s	332.37	Joback Method
dvisc	0.0011178	Pa×s	366.97	Joback Method
dvisc	0.0007677	Pa×s	401.56	Joback Method
dvisc	0.0005597	Pa×s	436.15	Joback Method
dvisc	0.0004274	Pa×s	470.75	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=C632213&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume