1,2-Dichloroethylene

Other names:	1,2-Dichloroethene,c&t
	1,2-Dichloroethylene,c&t
	Ethene, 1,2-dichloro-
	Ethylene, 1,2-dichloro-
	Acetylene dichloride
	1,2-Dichlor-aethen
	1,2-Dichloroethene
	Dichloro-1,2-ethylene
	sym-Dichloroethylene
	Dioform
	NCI-C56031
	1,2-Dichloroethene (mixed isomers)
	1,2-Dichloroethylene (cis & trans)
Inchi:	InChI=1S/C2H2Cl2/c3-1-2-4/h1-2H
InchiKey:	KFUSEUYYWQURPO-UHFFFAOYSA-N
Formula:	C2H2Cl2
SMILES:	ClC=CCl
Mol. weight [g/mol]:	96.94
CAS:	540-59-0

Physical Properties

Property code	Value	Unit	Source
gf	22.32	kJ/mol	Joback Method
hf	1.13	kJ/mol	Joback Method
hfus	9.53	kJ/mol	Joback Method
hvap	28.77	kJ/mol	Joback Method
log10ws	-1.81		Crippen Method
logp	1.935		Crippen Method
mcvol	59.220	ml/mol	McGowan Method
pc	4876.56	kPa	Joback Method
rinpol	556.00		NIST Webbook
rinpol	533.00		NIST Webbook
rinpol	552.00		NIST Webbook
rinpol	556.00		NIST Webbook
rinpol	552.00		NIST Webbook
ripol	861.00		NIST Webbook
ripol	856.00		NIST Webbook

ripol	846.00		NIST Webbook
ripol	856.00		NIST Webbook
tb	324.18	K	Joback Method
tc	517.06	K	Joback Method
tf	167.06	K	Joback Method
vc	0.226	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	67.02	J/mol×K	324.18	Joback Method
cpg	70.61	J/mol×K	356.33	Joback Method
cpg	73.95	J/mol×K	388.47	Joback Method
cpg	77.04	J/mol×K	420.62	Joback Method
cpg	79.90	J/mol×K	452.76	Joback Method
cpg	82.55	J/mol×K	484.91	Joback Method
cpg	84.99	J/mol×K	517.06	Joback Method
cpl	112.10	J/mol×K	298.00	NIST Webbook
dvisc	0.0028927	Pa×s	167.06	Joback Method
dvisc	0.0014903	Pa×s	193.25	Joback Method
dvisc	0.0008995	Pa×s	219.43	Joback Method
dvisc	0.0006046	Pa×s	245.62	Joback Method
dvisc	0.0004387	Pa×s	271.81	Joback Method
dvisc	0.0003368	Pa×s	297.99	Joback Method
dvisc	0.0002698	Pa×s	324.18	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=C540590&Units=SI

Legend

cpg:	Ideal gas heat capacity
cpl:	Liquid phase 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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume