

Propanoic acid, 2,2-dichloro-

Other names:	Propionic acid, 2,2-dichloro- «alpha», «alpha»-Dichloropropionic acid Alatex Basinex P D-Granulat Dalapon Dawpon-RAE Dowpon M DPA Sys-Omnidel 2,2-Dichloropropionic acid 2,2-DPA «alpha»-Dichloropropionic acid Kenapon Liropon Proprop Unipon 2,2-Dichloropropanoic acid BASFAPON B BASFAPON N BH Dalapon Crisapon Dalapon 85 Kyselina 2,2-dichloropropionova Revenge Dalapon-acid BASFAPON/N Davpon Dowpon proprop S95 Uropon Dalascam NSC 56352 S 1315 S 95 (herbicide) Tripon
Inchi:	InChI=1S/C3H4Cl2O2/c1-3(4,5)2(6)7/h1H3,(H,6,7)
InchiKey:	NDUPDOJHUQKPAY-UHFFFAOYSA-N
Formula:	C3H4Cl2O2
SMILES:	CC(Cl)(Cl)C(=O)O

Mol. weight [g/mol]: 142.97
CAS: 75-99-0

Physical Properties

Property code	Value	Unit	Source
gf	-312.38	kJ/mol	Joback Method
hf	-410.29	kJ/mol	Joback Method
hfus	10.19	kJ/mol	Joback Method
hvap	53.17	kJ/mol	Joback Method
log10ws	-1.09		Crippen Method
logp	1.265		Crippen Method
mcvol	85.050	ml/mol	McGowan Method
pc	5058.59	kPa	Joback Method
tb	460.70	K	NIST Webbook
tc	685.24	K	Joback Method
tf	296.58	K	Joback Method
vc	0.316	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	152.42	J/molxK	485.72	Joback Method
cpg	174.54	J/molxK	651.99	Joback Method
cpg	170.83	J/molxK	618.74	Joback Method
cpg	166.79	J/molxK	585.48	Joback Method
cpg	162.39	J/molxK	552.23	Joback Method
cpg	157.61	J/molxK	518.97	Joback Method
cpg	177.94	J/molxK	685.24	Joback Method
dvisc	0.0002698	Paxs	485.72	Joback Method
dvisc	0.0004227	Paxs	454.20	Joback Method
dvisc	0.0007080	Paxs	422.67	Joback Method
dvisc	0.0012889	Paxs	391.15	Joback Method
dvisc	0.0026062	Paxs	359.63	Joback Method
dvisc	0.0060331	Paxs	328.10	Joback Method
dvisc	0.0166946	Paxs	296.58	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	364.20	K	1.90	NIST Webbook
tbrp	372.00 ± 1.00	K	2.40	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C75990&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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