

Chloroacetic acid, hexyl ester

Other names:	1-Hexanol, chloroacetate Hexyl chloroacetate
Inchi:	InChI=1S/C8H15ClO2/c1-2-3-4-5-6-11-8(10)7-9/h2-7H2,1H3
InchiKey:	OJGRZJILAIHWIY-UHFFFAOYSA-N
Formula:	C8H15ClO2
SMILES:	CCCCCOC(=O)CCl
Mol. weight [g/mol]:	178.66
CAS:	5927-57-1

Physical Properties

Property code	Value	Unit	Source
gf	-229.37	kJ/mol	Joback Method
hf	-468.99	kJ/mol	Joback Method
hfus	23.46	kJ/mol	Joback Method
hvap	46.94	kJ/mol	Joback Method
log10ws	-2.19		Crippen Method
logp	2.349		Crippen Method
mvol	143.260	ml/mol	McGowan Method
pc	2558.51	kPa	Joback Method
ripol	1201.00		NIST Webbook
ripol	1200.00		NIST Webbook
ripol	1176.00		NIST Webbook
ripol	1207.50		NIST Webbook
ripol	1200.80		NIST Webbook
ripol	1216.00		NIST Webbook
ripol	1188.00		NIST Webbook
ripol	1192.00		NIST Webbook
ripol	1184.00		NIST Webbook
ripol	1178.00		NIST Webbook
ripol	1200.00		NIST Webbook
ripol	1176.00		NIST Webbook
ripol	1686.00		NIST Webbook
ripol	1690.00		NIST Webbook
ripol	1687.00		NIST Webbook
tb	496.16	K	Joback Method
tc	677.00	K	Joback Method
tf	282.00	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	307.66	J/molxK	496.16	Joback Method
cpg	319.52	J/molxK	526.30	Joback Method
cpg	330.91	J/molxK	556.44	Joback Method
cpg	341.84	J/molxK	586.58	Joback Method
cpg	352.32	J/molxK	616.72	Joback Method
cpg	362.34	J/molxK	646.86	Joback Method
cpg	371.92	J/molxK	677.00	Joback Method
dvisc	0.0030458	Paxs	282.00	Joback Method
dvisc	0.0016080	Paxs	317.69	Joback Method
dvisc	0.0009658	Paxs	353.39	Joback Method
dvisc	0.0006370	Paxs	389.08	Joback Method
dvisc	0.0004506	Paxs	424.77	Joback Method
dvisc	0.0003363	Paxs	460.47	Joback Method
dvisc	0.0002618	Paxs	496.16	Joback Method

Sources

McGowan Method:

<http://link.springer.com/article/10.1007/BF02311772>

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C5927571&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

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

h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀w_s:	Log10 of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
m_{cvol}:	McGowan's characteristic volume
p_c:	Critical Pressure
r_{inpol}:	Non-polar retention indices
r_{ipol}:	Polar retention indices
t_b:	Normal Boiling Point Temperature
t_c:	Critical Temperature
t_f:	Normal melting (fusion) point
v_c:	Critical Volume

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