

Chloromethyl 2-chlorononanoate

Other names:	2-Chlorononanoic acid, chloromethyl ester
Inchi:	InChI=1S/C10H18Cl2O2/c1-2-3-4-5-6-7-9(12)10(13)14-8-11/h9H,2-8H2,1H3
InchiKey:	ZFVRVFPFKKNKCD-UHFFFAOYSA-N
Formula:	C10H18Cl2O2
SMILES:	CCCCCCCC(Cl)C(=O)OCCI
Mol. weight [g/mol]:	241.16
CAS:	80418-71-9

Physical Properties

Property code	Value	Unit	Source
gf	-226.90	kJ/mol	Joback Method
hf	-531.29	kJ/mol	Joback Method
hfus	29.31	kJ/mol	Joback Method
hvap	55.39	kJ/mol	Joback Method
log10ws	-3.78		Crippen Method
logp	3.694		Crippen Method
mcvol	183.680	ml/mol	McGowan Method
pc	2069.88	kPa	Joback Method
rinpol	1508.00		NIST Webbook
rinpol	1501.00		NIST Webbook
rinpol	1509.00		NIST Webbook
ripol	1996.00		NIST Webbook
ripol	1996.00		NIST Webbook
ripol	2014.00		NIST Webbook
ripol	2013.00		NIST Webbook
tb	578.91	K	Joback Method
tc	764.42	K	Joback Method
tf	319.46	K	Joback Method
vc	0.712	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	427.73	J/molxK	578.91	Joback Method

cpg	441.05	J/molxK	609.83	Joback Method
cpg	453.75	J/molxK	640.75	Joback Method
cpg	465.85	J/molxK	671.67	Joback Method
cpg	477.36	J/molxK	702.58	Joback Method
cpg	488.28	J/molxK	733.50	Joback Method
cpg	498.63	J/molxK	764.42	Joback Method
dvisc	0.0032066	Paxs	319.46	Joback Method
dvisc	0.0015197	Paxs	362.70	Joback Method
dvisc	0.0008444	Paxs	405.94	Joback Method
dvisc	0.0005254	Paxs	449.19	Joback Method
dvisc	0.0003553	Paxs	492.43	Joback Method
dvisc	0.0002560	Paxs	535.67	Joback Method
dvisc	0.0001937	Paxs	578.91	Joback Method

Sources

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=C80418719&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume

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