

Chloromethyl 4-chloroheptanoate

Other names:	4-Chloroheptanoic acid, chloromethyl ester
Inchi:	InChI=1S/C8H14Cl2O2/c1-2-3-7(10)4-5-8(11)12-6-9/h7H,2-6H2,1H3
InchiKey:	ZEZMVWNYGQAVFR-UHFFFAOYSA-N
Formula:	C8H14Cl2O2
SMILES:	CCCC(CI)CCC(=O)OCCI
Mol. weight [g/mol]:	213.10
CAS:	80418-60-6

Physical Properties

Property code	Value	Unit	Source
gf	-243.74	kJ/mol	Joback Method
hf	-490.01	kJ/mol	Joback Method
hfus	24.13	kJ/mol	Joback Method
hvap	50.94	kJ/mol	Joback Method
log10ws	-2.95		Crippen Method
logp	2.914		Crippen Method
mcvol	155.500	ml/mol	McGowan Method
pc	2485.07	kPa	Joback Method
rinpol	1373.00		NIST Webbook
rinpol	1373.00		NIST Webbook
rinpol	1360.00		NIST Webbook
rinpol	1340.00		NIST Webbook
rinpol	1352.00		NIST Webbook
ripol	1933.00		NIST Webbook
ripol	1886.00		NIST Webbook
ripol	1910.00		NIST Webbook
ripol	1886.00		NIST Webbook
ripol	1935.00		NIST Webbook
tb	533.15	K	Joback Method
tc	722.96	K	Joback Method
tf	296.92	K	Joback Method
vc	0.600	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	334.71	J/molxK	533.15	Joback Method
cpg	346.37	J/molxK	564.79	Joback Method
cpg	357.50	J/molxK	596.42	Joback Method
cpg	368.12	J/molxK	628.06	Joback Method
cpg	378.23	J/molxK	659.69	Joback Method
cpg	387.84	J/molxK	691.33	Joback Method
cpg	396.95	J/molxK	722.96	Joback Method
dvisc	0.0035993	Paxs	296.92	Joback Method
dvisc	0.0017614	Paxs	336.29	Joback Method
dvisc	0.0010012	Paxs	375.66	Joback Method
dvisc	0.0006335	Paxs	415.03	Joback Method
dvisc	0.0004339	Paxs	454.41	Joback Method
dvisc	0.0003157	Paxs	493.78	Joback Method
dvisc	0.0002408	Paxs	533.15	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C80418606&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
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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