2-Chlorohexanoic acid, methyl ester

Other names:	methyl 2-chlorohexanoate
Inchi:	InChI=1S/C7H13ClO2/c1-3-4-5-6(8)7(9)10-2/h6H,3-5H2,1-2H3
InchiKey:	ZKEGALQDZGNQIK-UHFFFAOYSA-N
Formula:	C7H13ClO2
SMILES:	CCCCC(Cl)C(=O)OC
Mol. weight [g/mol]:	164.63
CAS:	14925-60-1

Physical Properties

Property code	Value	Unit	Source
gf	-240.23	kJ/mol	Joback Method
hf	-453.63	kJ/mol	Joback Method
hfus	17.35	kJ/mol	Joback Method
hvap	44.33	kJ/mol	Joback Method
log10ws	-1.88		Crippen Method
logp	1.957		Crippen Method
mcvol	129.170	ml/mol	McGowan Method
pc	2850.52	kPa	Joback Method
rinpol	1047.00		NIST Webbook
ripol	1436.00		NIST Webbook
ripol	1470.00		NIST Webbook
ripol	1436.00		NIST Webbook
tb	472.84	K	Joback Method
tc	659.46	K	Joback Method
tf	255.73	K	Joback Method
vc	0.494	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	265.41	J/mol×K	472.84	Joback Method
cpg	316.63	J/mol×K	628.35	Joback Method
cpg	307.25	J/mol×K	597.25	Joback Method
cpg	297.44	J/mol×K	566.15	Joback Method

cpg	287.19	J/mol×K	535.05	Joback Method
cpg	276.52	J/mol×K	503.94	Joback Method
cpg	325.59	J/mol×K	659.46	Joback Method
dvisc	0.0002680	Pa×s	472.84	Joback Method
dvisc	0.0003514	Pa×s	436.65	Joback Method
dvisc	0.0004840	Pa×s	400.47	Joback Method
dvisc	0.0007104	Pa×s	364.28	Joback Method
dvisc	0.0011348	Pa×s	328.10	Joback Method
dvisc	0.0020358	Pa×s	291.92	Joback Method
dvisc	0.0043091	Pa×s	255.73	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C14925601&Units=SI
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

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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