

# 7-Chlorodecanoic acid, methyl ester

<b>Inchi:</b>	InChI=1S/C11H21ClO2/c1-3-7-10(12)8-5-4-6-9-11(13)14-2/h10H,3-9H2,1-2H3
<b>InchiKey:</b>	YGMZRKDHZZUJMY-UHFFFAOYSA-N
<b>Formula:</b>	C11H21ClO2
<b>SMILES:</b>	CCCC(Cl)CCCCC(=O)OC
<b>Mol. weight [g/mol]:</b>	220.74

## Physical Properties

Property code	Value	Unit	Source
gf	-206.55	kJ/mol	Joback Method
hf	-536.19	kJ/mol	Joback Method
hfus	27.71	kJ/mol	Joback Method
hvap	53.23	kJ/mol	Joback Method
log10ws	-3.55		Crippen Method
logp	3.517		Crippen Method
mcvol	185.530	ml/mol	McGowan Method
pc	1963.07	kPa	Joback Method
ripol	1500.00		NIST Webbook
ripol	1506.00		NIST Webbook
ripol	1506.00		NIST Webbook
ripol	1976.00		NIST Webbook
ripol	1936.00		NIST Webbook
ripol	1976.00		NIST Webbook
tb	564.36	K	Joback Method
tc	743.50	K	Joback Method
tf	300.81	K	Joback Method
vc	0.719	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	446.93	J/molxK	564.36	Joback Method
cpg	461.63	J/molxK	594.22	Joback Method
cpg	475.70	J/molxK	624.07	Joback Method
cpg	489.15	J/molxK	653.93	Joback Method

cpg	501.98	J/mol×K	683.78	Joback Method
cpg	514.22	J/mol×K	713.64	Joback Method
cpg	525.87	J/mol×K	743.50	Joback Method
dvisc	0.0036823	Paxs	300.81	Joback Method
dvisc	0.0016303	Paxs	344.74	Joback Method
dvisc	0.0008677	Paxs	388.66	Joback Method
dvisc	0.0005249	Paxs	432.59	Joback Method
dvisc	0.0003484	Paxs	476.51	Joback Method
dvisc	0.0002478	Paxs	520.44	Joback Method
dvisc	0.0001859	Paxs	564.36	Joback Method

## Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R309729&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R309729&amp;Units=SI</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mccvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	Polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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