

# Malonic acid, 10-chlorodecyl ethyl ester

<b>Inchi:</b>	InChI=1S/C15H27ClO4/c1-2-19-14(17)13-15(18)20-12-10-8-6-4-3-5-7-9-11-16/h2-13H2,
<b>InchiKey:</b>	CYTQLGHFERDHGV-UHFFFAOYSA-N
<b>Formula:</b>	C15H27ClO4
<b>SMILES:</b>	CCOC(=O)CC(=O)OCCCCCCCCCCI
<b>Mol. weight [g/mol]:</b>	306.82

## Physical Properties

Property code	Value	Unit	Source
gf	-404.35	kJ/mol	Joback Method
hf	-858.27	kJ/mol	Joback Method
hfus	44.38	kJ/mol	Joback Method
hvap	71.68	kJ/mol	Joback Method
log10ws	-3.98		Crippen Method
logp	3.842		Crippen Method
mcvol	249.330	ml/mol	McGowan Method
pc	1475.88	kPa	Joback Method
rinpola	2135.00		NIST Webbook
rinpola	2135.00		NIST Webbook
tb	732.61	K	Joback Method
tc	913.43	K	Joback Method
tf	433.05	K	Joback Method
vc	0.973	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	708.19	J/molxK	732.61	Joback Method
cpg	776.72	J/molxK	883.29	Joback Method
cpg	764.59	J/molxK	853.16	Joback Method
cpg	751.68	J/molxK	823.02	Joback Method
cpg	737.98	J/molxK	792.88	Joback Method
cpg	723.48	J/molxK	762.75	Joback Method
cpg	788.08	J/molxK	913.43	Joback Method
dvisc	0.0000935	Paxs	732.61	Joback Method

dvisc	0.0001215	Paxs	682.68	Joback Method
dvisc	0.0001647	Paxs	632.76	Joback Method
dvisc	0.0002352	Paxs	582.83	Joback Method
dvisc	0.0003590	Paxs	532.90	Joback Method
dvisc	0.0005981	Paxs	482.98	Joback Method
dvisc	0.0011207	Paxs	433.05	Joback Method

## Sources

<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=U349038&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U349038&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>

## Legend

<b>cp<sub>g</sub>:</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>log<sub>10</sub>ws:</b>	Log <sub>10</sub> of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>m<sub>cvol</sub>:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-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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