

# Benzoic acid, 3-chloro-, ethyl ester

<b>Other names:</b>	Benzoic acid, m-chloro-, ethyl ester Ethyl m-chlorobenzoate Ethyl 3-chlorobenzoate 3-Chlorobenzoic acid, ethyl ester
<b>Inchi:</b>	InChI=1S/C9H9ClO2/c1-2-12-9(11)7-4-3-5-8(10)6-7/h3-6H,2H2,1H3
<b>InchiKey:</b>	LVFRSNCBCHABAM-UHFFFAOYSA-N
<b>Formula:</b>	C9H9ClO2
<b>SMILES:</b>	CCOC(=O)c1cccc(Cl)c1
<b>Mol. weight [g/mol]:</b>	184.62
<b>CAS:</b>	1128-76-3

## Physical Properties

Property code	Value	Unit	Source
gf	-118.17	kJ/mol	Joback Method
hf	-264.57	kJ/mol	Joback Method
hfus	19.70	kJ/mol	Joback Method
hvap	52.11	kJ/mol	Joback Method
log10ws	-2.82		Crippen Method
logp	2.517		Crippen Method
mcvol	133.590	ml/mol	McGowan Method
pc	3239.34	kPa	Joback Method
rinpol	1340.00		NIST Webbook
rinpol	1318.00		NIST Webbook
rinpol	1335.00		NIST Webbook
rinpol	1323.00		NIST Webbook
rinpol	1331.00		NIST Webbook
rinpol	1340.00		NIST Webbook
rinpol	1316.00		NIST Webbook
rinpol	1316.00		NIST Webbook
rinpol	1305.00		NIST Webbook
rinpol	1317.00		NIST Webbook
rinpol	1305.00		NIST Webbook
rinpol	1314.00		NIST Webbook
rinpol	1316.00		NIST Webbook
rinpol	1314.00		NIST Webbook
rinpol	1317.00		NIST Webbook
rinpol	1318.00		NIST Webbook

ripol	1832.00		NIST Webbook
ripol	1850.00		NIST Webbook
ripol	1887.00		NIST Webbook
ripol	1893.00		NIST Webbook
ripol	1909.00		NIST Webbook
ripol	1863.00		NIST Webbook
ripol	1863.00		NIST Webbook
tb	550.70	K	Joback Method
tc	772.80	K	Joback Method
tf	332.21	K	Joback Method
vc	0.504	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	280.82	J/molxK	550.70	Joback Method
cpg	292.35	J/molxK	587.72	Joback Method
cpg	303.20	J/molxK	624.73	Joback Method
cpg	313.39	J/molxK	661.75	Joback Method
cpg	322.92	J/molxK	698.76	Joback Method
cpg	331.82	J/molxK	735.78	Joback Method
cpg	340.09	J/molxK	772.80	Joback Method
dvisc	0.0016956	Paxs	332.21	Joback Method
dvisc	0.0010290	Paxs	368.63	Joback Method
dvisc	0.0006831	Paxs	405.04	Joback Method
dvisc	0.0004852	Paxs	441.46	Joback Method
dvisc	0.0003631	Paxs	477.87	Joback Method
dvisc	0.0002831	Paxs	514.29	Joback Method
dvisc	0.0002281	Paxs	550.70	Joback Method

## Sources

**Crippen Method:**

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

**Crippen Method:**

[https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

**Joback Method:**

[https://en.wikipedia.org/wiki/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=C1128763&Units=SI>

# 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>mcvol:</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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