

# Carbonic acid, ethyl 2-ethylhexyl ester

<b>Inchi:</b>	InChI=1S/C11H22O3/c1-4-7-8-10(5-2)9-14-11(12)13-6-3/h10H,4-9H2,1-3H3
<b>InchiKey:</b>	YSWQDPOQWBKMIX-UHFFFAOYSA-N
<b>Formula:</b>	C11H22O3
<b>SMILES:</b>	CCCCC(CC)COC(=O)OCC
<b>Mol. weight [g/mol]:</b>	202.29

## Physical Properties

Property code	Value	Unit	Source
gf	-299.62	kJ/mol	Joback Method
hf	-652.67	kJ/mol	Joback Method
hfus	24.70	kJ/mol	Joback Method
hvap	51.26	kJ/mol	Joback Method
log10ws	-3.11		Crippen Method
logp	3.376		Crippen Method
mvol	179.160	ml/mol	McGowan Method
pc	1998.33	kPa	Joback Method
rinpol	1295.00		NIST Webbook
rinpol	1295.00		NIST Webbook
tb	549.35	K	Joback Method
tc	723.04	K	Joback Method
tf	293.12	K	Joback Method
vc	0.688	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	442.54	J/molxK	549.35	Joback Method
cpg	457.61	J/molxK	578.30	Joback Method
cpg	472.13	J/molxK	607.25	Joback Method
cpg	486.07	J/molxK	636.19	Joback Method
cpg	499.46	J/molxK	665.14	Joback Method
cpg	512.28	J/molxK	694.09	Joback Method
cpg	524.54	J/molxK	723.04	Joback Method
dvisc	0.0030774	Paxs	293.12	Joback Method

dvisc	0.0013647	Paxs	335.82	Joback Method
dvisc	0.0007270	Paxs	378.53	Joback Method
dvisc	0.0004401	Paxs	421.24	Joback Method
dvisc	0.0002922	Paxs	463.94	Joback Method
dvisc	0.0002079	Paxs	506.65	Joback Method
dvisc	0.0001559	Paxs	549.35	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U383131&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U383131&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>
<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>

## 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>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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