

# Carbonic acid, heptyl vinyl ester

<b>Inchi:</b>	InChI=1S/C10H18O3/c1-3-5-6-7-8-9-13-10(11)12-4-2/h4H,2-3,5-9H2,1H3
<b>InchiKey:</b>	IURQOEHHKGDPMN-UHFFFAOYSA-N
<b>Formula:</b>	C10H18O3
<b>SMILES:</b>	C=COC(=O)OCCCCCCC
<b>Mol. weight [g/mol]:</b>	186.25

## Physical Properties

Property code	Value	Unit	Source
gf	-217.76	kJ/mol	Joback Method
hf	-501.32	kJ/mol	Joback Method
hfus	24.35	kJ/mol	Joback Method
hvap	48.75	kJ/mol	Joback Method
log10ws	-3.28		Crippen Method
logp	3.253		Crippen Method
mcvol	160.770	ml/mol	McGowan Method
pc	2252.53	kPa	Joback Method
rinpol	1218.00		NIST Webbook
tb	523.59	K	Joback Method
tc	698.47	K	Joback Method
tf	295.09	K	Joback Method
vc	0.619	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	375.30	J/molxK	523.59	Joback Method
cpg	388.70	J/molxK	552.74	Joback Method
cpg	401.60	J/molxK	581.88	Joback Method
cpg	414.01	J/molxK	611.03	Joback Method
cpg	425.92	J/molxK	640.18	Joback Method
cpg	437.34	J/molxK	669.33	Joback Method
cpg	448.27	J/molxK	698.47	Joback Method
dvisc	0.0022271	Paxs	295.09	Joback Method
dvisc	0.0011630	Paxs	333.17	Joback Method

dvisc	0.0006939	Paxs	371.26	Joback Method
dvisc	0.0004558	Paxs	409.34	Joback Method
dvisc	0.0003216	Paxs	447.42	Joback Method
dvisc	0.0002397	Paxs	485.51	Joback Method
dvisc	0.0001864	Paxs	523.59	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U383254&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U383254&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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