

# 1,2,4-Trioxolane, 3,5-diphenyl-

<b>Other names:</b>	Benzene, 1,1'-(1,2-ethenediyl)bis-, ozonide 3,5-diphenyl-1,2,4-trioxolane
<b>Inchi:</b>	InChI=1S/C14H12O3/c1-3-7-11(8-4-1)13-15-14(17-16-13)12-9-5-2-6-10-12/h1-10,13-14H
<b>InchiKey:</b>	FFNQUPJQBYSJAG-UHFFFAOYSA-N
<b>Formula:</b>	C14H12O3
<b>SMILES:</b>	c1ccc(C2OOC(c3ccccc3)O2)cc1
<b>Mol. weight [g/mol]:</b>	228.24
<b>CAS:</b>	23888-15-5

## Physical Properties

Property code	Value	Unit	Source
chs	-7100.00 ± 8.00	kJ/mol	NIST Webbook
gf	62.30	kJ/mol	Joback Method
hf	-215.09	kJ/mol	Joback Method
hfus	39.04	kJ/mol	Joback Method
hvap	64.79	kJ/mol	Joback Method
log10ws	-3.94		Crippen Method
logp	3.362		Crippen Method
mcvol	167.350	ml/mol	McGowan Method
pc	3156.17	kPa	Joback Method
tb	664.54	K	Joback Method
tc	928.62	K	Joback Method
tf	386.75	K	Joback Method
vc	0.607	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	454.67	J/molxK	664.54	Joback Method
cpg	527.91	J/molxK	884.61	Joback Method
cpg	516.15	J/molxK	840.60	Joback Method
cpg	503.04	J/molxK	796.58	Joback Method
cpg	488.49	J/molxK	752.57	Joback Method
cpg	472.40	J/molxK	708.55	Joback Method

cpg	538.42	J/mol×K	928.62	Joback Method
dvisc	0.0002598	Paxs	664.54	Joback Method
dvisc	0.0003269	Paxs	618.24	Joback Method
dvisc	0.0004269	Paxs	571.94	Joback Method
dvisc	0.0005844	Paxs	525.64	Joback Method
dvisc	0.0008501	Paxs	479.35	Joback Method
dvisc	0.0013397	Paxs	433.05	Joback Method
dvisc	0.0023542	Paxs	386.75	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C23888155&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C23888155&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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>chs:</b>	Standard solid enthalpy of combustion
<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>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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