

# trans-2,3-epoxyundecanal

<b>Inchi:</b>	InChI=1S/C11H20O2/c1-2-3-4-5-6-7-8-10-11(9-12)13-10/h9-11H,2-8H2,1H3/t10-,11-/m0
<b>InchiKey:</b>	LZLASHVOFOBXCU-QWRGUYRKSA-N
<b>Formula:</b>	C11H20O2
<b>SMILES:</b>	CCCCCCCCC1OC1C=O
<b>Mol. weight [g/mol]:</b>	184.28

## Physical Properties

Property code	Value	Unit	Source
gf	-90.86	kJ/mol	Joback Method
hf	-435.49	kJ/mol	Joback Method
hfus	33.72	kJ/mol	Joback Method
hvap	50.91	kJ/mol	Joback Method
log10ws	-2.91		Crippen Method
logp	2.703		Crippen Method
mcvol	162.430	ml/mol	McGowan Method
pc	2241.88	kPa	Joback Method
rinsol	1396.00		NIST Webbook
ripol	1859.00		NIST Webbook
tb	528.76	K	Joback Method
tc	707.74	K	Joback Method
tf	296.00	K	Joback Method
vc	0.645	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	408.32	J/molxK	528.76	Joback Method
cpg	423.92	J/molxK	558.59	Joback Method
cpg	438.78	J/molxK	588.42	Joback Method
cpg	452.93	J/molxK	618.25	Joback Method
cpg	466.40	J/molxK	648.08	Joback Method
cpg	479.21	J/molxK	677.91	Joback Method
cpg	491.39	J/molxK	707.74	Joback Method
dvisc	0.0028064	Paxs	296.00	Joback Method

dvisc	0.0018957	Paxs	334.79	Joback Method
dvisc	0.0013893	Paxs	373.59	Joback Method
dvisc	0.0010794	Paxs	412.38	Joback Method
dvisc	0.0008759	Paxs	451.17	Joback Method
dvisc	0.0007346	Paxs	489.97	Joback Method
dvisc	0.0006322	Paxs	528.76	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=R237124&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R237124&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</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>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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