

# (7S,8R)-cis-7,8-epoxy-octadecane [(-)-monachalure]

Inchi:	InChI=1S/C18H36O/c1-3-5-7-9-10-11-12-14-16-18-17(19-18)15-13-8-6-4-2/h17-18H,3-16
InchiKey:	ABMJUFOPOPEJRG-QZTJIDSGSA-N
Formula:	C18H36O
SMILES:	CCCCCCCCC1OC1CCCCC
Mol. weight [g/mol]:	268.48

## Physical Properties

Property code	Value	Unit	Source
gf	67.60	kJ/mol	Joback Method
hf	-494.39	kJ/mol	Joback Method
hfus	49.56	kJ/mol	Joback Method
hvap	59.78	kJ/mol	Joback Method
log10ws	-6.56		Crippen Method
logp	6.255		Crippen Method
mcvol	259.490	ml/mol	McGowan Method
pc	1224.27	kPa	Joback Method
rinpol	1971.00		NIST Webbook
tb	640.26	K	Joback Method
tc	807.77	K	Joback Method
tf	332.89	K	Joback Method
vc	1.020	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	750.72	J/molxK	640.26	Joback Method
cpg	771.06	J/molxK	668.18	Joback Method
cpg	790.51	J/molxK	696.10	Joback Method
cpg	809.09	J/molxK	724.02	Joback Method
cpg	826.85	J/molxK	751.93	Joback Method
cpg	843.82	J/molxK	779.85	Joback Method
cpg	860.03	J/molxK	807.77	Joback Method
dvisc	0.0028162	Paxs	332.89	Joback Method
dvisc	0.0015636	Paxs	384.12	Joback Method

dvisc	0.0009971	Paxs	435.35	Joback Method
dvisc	0.0006990	Paxs	486.57	Joback Method
dvisc	0.0005243	Paxs	537.80	Joback Method
dvisc	0.0004135	Paxs	589.03	Joback Method
dvisc	0.0003387	Paxs	640.26	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R501643&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R501643&amp;Units=SI</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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