

# cis-7,8-epoxy-2-methyl-E12-octadecene

Inchi:	InChI=1S/C19H36O/c1-4-5-6-7-8-9-10-11-15-18-19(20-18)16-13-12-14-17(2)3/h8-9,17-1
InchiKey:	MRJWGCAZSVVLNB-CMDGGGOBGS-A-N
Formula:	C19H36O
SMILES:	CCCCC=CCCC1OC1CCCC(C)C
Mol. weight [g/mol]:	280.49

## Physical Properties

Property code	Value	Unit	Source
gf	153.80	kJ/mol	Joback Method
hf	-403.09	kJ/mol	Joback Method
hfus	48.83	kJ/mol	Joback Method
hvap	61.57	kJ/mol	Joback Method
log10ws	-6.59		Crippen Method
logp	6.277		Crippen Method
mvol	269.280	ml/mol	McGowan Method
pc	1194.00	kPa	Joback Method
ripol	2010.00		NIST Webbook
tb	666.86	K	Joback Method
tc	841.46	K	Joback Method
tf	324.08	K	Joback Method
vc	1.050	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	788.54	J/molxK	666.86	Joback Method
cpg	882.29	J/molxK	812.36	Joback Method
cpg	865.28	J/molxK	783.26	Joback Method
cpg	847.45	J/molxK	754.16	Joback Method
cpg	828.75	J/molxK	725.06	Joback Method
cpg	809.13	J/molxK	695.96	Joback Method
cpg	898.52	J/molxK	841.46	Joback Method
dvisc	0.0002498	Paxs	666.86	Joback Method
dvisc	0.0003118	Paxs	609.73	Joback Method

dvisc	0.0004073	Paxs	552.60	Joback Method
dvisc	0.0005660	Paxs	495.47	Joback Method
dvisc	0.0008570	Paxs	438.34	Joback Method
dvisc	0.0014694	Paxs	381.21	Joback Method
dvisc	0.0030466	Paxs	324.08	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=R413640&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R413640&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>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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