

# cis-Linoleic acid

<b>Inchi:</b>	InChI=1S/C17H30O2/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17(18)19/h5-6,8-9H,2-4,7
<b>InchiKey:</b>	LEIXEEFBKOMCEQ-AFJQJTPPSA-N
<b>Formula:</b>	C17H30O2
<b>SMILES:</b>	CCCCC=CCC=CCCCCCCC(=O)O
<b>Mol. weight [g/mol]:</b>	266.42

## Physical Properties

Property code	Value	Unit	Source
gf	-13.04	kJ/mol	Joback Method
hf	-424.58	kJ/mol	Joback Method
hfus	45.88	kJ/mol	Joback Method
hvap	76.78	kJ/mol	Joback Method
log10ws	-5.74		Crippen Method
logp	5.494		Crippen Method
mvol	249.230	ml/mol	McGowan Method
pc	1489.58	kPa	Joback Method
rinpol	2179.00		NIST Webbook
rinpol	2179.00		NIST Webbook
tb	742.73	K	Joback Method
tc	919.86	K	Joback Method
tf	381.94	K	Joback Method
vc	0.973	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	729.74	J/molxK	742.73	Joback Method
cpg	745.14	J/molxK	772.25	Joback Method
cpg	759.82	J/molxK	801.77	Joback Method
cpg	773.81	J/molxK	831.30	Joback Method
cpg	787.17	J/molxK	860.82	Joback Method
cpg	799.94	J/molxK	890.34	Joback Method
cpg	812.15	J/molxK	919.86	Joback Method
dvisc	0.0028125	Paxs	381.94	Joback Method

dvisc	0.0007191	Paxs	442.07	Joback Method
dvisc	0.0002549	Paxs	502.20	Joback Method
dvisc	0.0001128	Paxs	562.34	Joback Method
dvisc	0.0000584	Paxs	622.47	Joback Method
dvisc	0.0000340	Paxs	682.60	Joback Method
dvisc	0.0000216	Paxs	742.73	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=R295600&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R295600&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>

## 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>log<sub>p</sub>:</b>	Octanol/Water partition coefficient
<b>m<sub>c</sub>vol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rin<sub>pol</sub>:</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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