

# Pentacyclo[6.3.1.13,6.02,7.09,11]tridecane

<b>Other names:</b>	Pentacyclo[6.3.1.1
<b>Inchi:</b>	InChI=1S/C13H18/c1-2-7-3-6(1)12-10-5-11(13(7)12)9-4-8(9)10/h6-13H,1-5H2
<b>InchiKey:</b>	KONJIGRBVREIQG-UHFFFAOYSA-N
<b>Formula:</b>	C13H18
<b>SMILES:</b>	C1CC2CC1C1C3CC(C4CC43)C21
<b>Mol. weight [g/mol]:</b>	174.28
<b>CAS:</b>	61140-68-9

## Physical Properties

Property code	Value	Unit	Source
chl	-7713.90 ± 3.80	kJ/mol	NIST Webbook
gf	363.40	kJ/mol	Joback Method
hf	3.65	kJ/mol	Joback Method
hfl	25.80 ± 3.80	kJ/mol	NIST Webbook
hfus	27.51	kJ/mol	Joback Method
hvap	42.83	kJ/mol	Joback Method
log10ws	-2.80		Crippen Method
logp	2.934		Crippen Method
mcvol	139.730	ml/mol	McGowan Method
pc	2589.85	kPa	Joback Method
tb	507.99	K	Joback Method
tc	720.91	K	Joback Method
tf	320.29	K	Joback Method
vc	0.561	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	388.98	J/molxK	507.99	Joback Method
cpg	411.84	J/molxK	543.48	Joback Method
cpg	432.92	J/molxK	578.96	Joback Method
cpg	452.38	J/molxK	614.45	Joback Method
cpg	470.39	J/molxK	649.94	Joback Method
cpg	487.11	J/molxK	685.43	Joback Method

cpg	502.71	J/molxK	720.91	Joback Method
dvisc	0.0009709	Paxs	320.29	Joback Method
dvisc	0.0017962	Paxs	351.57	Joback Method
dvisc	0.0030052	Paxs	382.86	Joback Method
dvisc	0.0046518	Paxs	414.14	Joback Method
dvisc	0.0067721	Paxs	445.42	Joback Method
dvisc	0.0093846	Paxs	476.71	Joback Method
dvisc	0.0124927	Paxs	507.99	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=C61140689&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C61140689&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>chl:</b>	Standard liquid 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>hfl:</b>	Liquid phase 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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