

# 6,10,14,20-tetramethyloctatriacontane

**Inchi:** InChI=1S/C42H86/c1-7-9-11-12-13-14-15-16-17-18-19-20-21-22-23-26-32-39(3)33-27-24  
**InchiKey:** CHNAUVRZCNBWJW-UHFFFAOYSA-N  
**Formula:** C42H86  
**SMILES:** CCCCCCCCCCCCCCCCCC(C)CCCCC(C)CCCC(C)CCCC(C)CCCC  
**Mol. weight [g/mol]:** 591.13

## Physical Properties

Property code	Value	Unit	Source
gf	293.00	kJ/mol	Joback Method
hf	-931.33	kJ/mol	Joback Method
hfus	90.44	kJ/mol	Joback Method
hvap	107.53	kJ/mol	Joback Method
log10ws	-16.44		Crippen Method
logp	16.054		Crippen Method
mcvol	602.640	ml/mol	McGowan Method
pc	367.28	kPa	Joback Method
rinpol	3915.00		NIST Webbook
rinpol	3915.00		NIST Webbook
tb	1158.60	K	Joback Method
tc	1560.30	K	Joback Method
tf	503.10	K	Joback Method
vc	2.364	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2317.22	J/mol×K	1158.60	Joback Method
cpg	2507.29	J/mol×K	1493.35	Joback Method
cpg	2474.46	J/mol×K	1426.40	Joback Method
cpg	2439.92	J/mol×K	1359.45	Joback Method
cpg	2402.78	J/mol×K	1292.50	Joback Method
cpg	2362.17	J/mol×K	1225.55	Joback Method
cpg	2539.27	J/mol×K	1560.30	Joback Method
dvisc	0.0000024	Paxs	1158.60	Joback Method

dvisc	0.0000036	Paxs	1049.35	Joback Method
dvisc	0.0000058	Paxs	940.10	Joback Method
dvisc	0.0000108	Paxs	830.85	Joback Method
dvisc	0.0000241	Paxs	721.60	Joback Method
dvisc	0.0000718	Paxs	612.35	Joback Method
dvisc	0.0003438	Paxs	503.10	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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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=R280405&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R280405&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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