

# 3,7-dimethyl-hentriacontane

**Inchi:** InChI=1S/C33H68/c1-5-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-31-32-33  
**InchiKey:** BHQONPCFMSTAIS-UHFFFAOYSA-N  
**Formula:** C33H68  
**SMILES:** CCCCCCCCCCCCCCCCCCCCCCCCC(C)CCCC(C)CC  
**Mol. weight [g/mol]:** 464.89

## Physical Properties

Property code	Value	Unit	Source
gf	222.10	kJ/mol	Joback Method
hf	-735.01	kJ/mol	Joback Method
hfus	74.18	kJ/mol	Joback Method
hvap	88.28	kJ/mol	Joback Method
log10ws	-13.15		Crippen Method
logp	12.831		Crippen Method
mcvol	475.830	ml/mol	McGowan Method
pc	523.65	kPa	Joback Method
rinpol	3209.00		NIST Webbook
rinpol	3209.00		NIST Webbook
rinpol	3203.00		NIST Webbook
rinpol	3208.00		NIST Webbook
rinpol	3209.00		NIST Webbook
rinpol	3210.00		NIST Webbook
rinpol	3209.00		NIST Webbook
rinpol	3210.00		NIST Webbook
tb	953.56	K	Joback Method
tc	1187.32	K	Joback Method
tf	431.67	K	Joback Method
vc	1.871	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1687.29	J/molxK	953.56	Joback Method
cpg	1717.36	J/molxK	992.52	Joback Method

cpg	1745.48	J/molxK	1031.48	Joback Method
cpg	1771.77	J/molxK	1070.44	Joback Method
cpg	1796.37	J/molxK	1109.40	Joback Method
cpg	1819.42	J/molxK	1148.36	Joback Method
cpg	1841.06	J/molxK	1187.32	Joback Method
dvisc	0.0010674	Paxs	431.67	Joback Method
dvisc	0.0002747	Paxs	518.65	Joback Method
dvisc	0.0001044	Paxs	605.63	Joback Method
dvisc	0.0000506	Paxs	692.62	Joback Method
dvisc	0.0000288	Paxs	779.60	Joback Method
dvisc	0.0000184	Paxs	866.58	Joback Method
dvisc	0.0000127	Paxs	953.56	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=R272385&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R272385&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>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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