

# 2-Methylhentriacontane

**Inchi:** InChI=1S/C32H66/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26  
**InchiKey:** XRBHKBOAKDZICV-UHFFFAOYSA-N  
**Formula:** C32H66  
**SMILES:** CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC(C)C  
**Mol. weight [g/mol]:** 450.87  
**CAS:** 1720-12-3

## Physical Properties

Property code	Value	Unit	Source
gf	216.12	kJ/mol	Joback Method
hf	-709.09	kJ/mol	Joback Method
hfus	75.11	kJ/mol	Joback Method
hvap	86.44	kJ/mol	Joback Method
log10ws	-12.98		Crippen Method
logp	12.585		Crippen Method
mcvol	461.740	ml/mol	McGowan Method
pc	545.39	kPa	Joback Method
rinpol	3159.60		NIST Webbook
rinpol	3159.60		NIST Webbook
rinpol	3162.00		NIST Webbook
rinpol	3165.00		NIST Webbook
rinpol	3162.00		NIST Webbook
rinpol	3175.00		NIST Webbook
rinpol	3160.00		NIST Webbook
rinpol	3162.00		NIST Webbook
tb	931.12	K	Joback Method
tc	1155.67	K	Joback Method
tf	435.40	K	Joback Method
vc	1.821	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1768.88	J/molxK	1155.67	Joback Method

cpg	1618.39	J/molxK	931.12	Joback Method
cpg	1647.62	J/molxK	968.55	Joback Method
cpg	1675.03	J/molxK	1005.97	Joback Method
cpg	1700.75	J/molxK	1043.40	Joback Method
cpg	1724.89	J/molxK	1080.82	Joback Method
cpg	1747.56	J/molxK	1118.25	Joback Method
dvisc	0.0000163	Paxs	931.12	Joback Method
dvisc	0.0009952	Paxs	435.40	Joback Method
dvisc	0.0002905	Paxs	518.02	Joback Method
dvisc	0.0001190	Paxs	600.64	Joback Method
dvisc	0.0000605	Paxs	683.26	Joback Method
dvisc	0.0000356	Paxs	765.88	Joback Method
dvisc	0.0000232	Paxs	848.50	Joback Method
hvapt	120.90	kJ/mol	604.50	NIST Webbook

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.48922e+01
Coeff. B	-5.65952e+03
Coeff. C	-1.83850e+02
Temperature range (K), min.	571.37
Temperature range (K), max.	774.57

## 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=C1720123&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1720123&amp;Units=SI</a>
<b>The Yaws Handbook of Vapor Pressure:</b>	<a href="https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure">https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure</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>hvapt:</b>	Enthalpy of vaporization at a given temperature
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mccvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>pvap:</b>	Vapor 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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