

# 12,20-Dimethylhexatriacontane

<b>Inchi:</b>	InChI=1S/C38H78/c1-5-7-9-11-13-15-16-17-18-19-21-23-26-30-34-38(4)36-32-28-24-27
<b>InchiKey:</b>	XIVDGPGRIKOCCP-UHFFFAOYSA-N
<b>Formula:</b>	C38H78
<b>SMILES:</b>	CCCCCCCCCCCCCCCC(C)CCCCCCC(C)CCCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	535.03

## Physical Properties

Property code	Value	Unit	Source
gf	264.20	kJ/mol	Joback Method
hf	-838.21	kJ/mol	Joback Method
hfus	87.13	kJ/mol	Joback Method
hvap	99.41	kJ/mol	Joback Method
log10ws	-15.25		Crippen Method
logp	14.782		Crippen Method
mcvol	546.280	ml/mol	McGowan Method
pc	425.12	kPa	Joback Method
rinpol	3666.00		NIST Webbook
rinpol	3666.00		NIST Webbook
tb	1067.96	K	Joback Method
tc	1383.24	K	Joback Method
tf	488.02	K	Joback Method
vc	2.151	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2035.13	J/mol×K	1067.96	Joback Method
cpg	2072.99	J/mol×K	1120.51	Joback Method
cpg	2107.70	J/mol×K	1173.05	Joback Method
cpg	2139.64	J/mol×K	1225.60	Joback Method
cpg	2169.20	J/mol×K	1278.14	Joback Method
cpg	2196.76	J/mol×K	1330.69	Joback Method
cpg	2222.69	J/mol×K	1383.24	Joback Method
dvisc	0.0004682	Paxs	488.02	Joback Method

dvisc	0.0001222	Paxs	584.68	Joback Method
dvisc	0.0000467	Paxs	681.33	Joback Method
dvisc	0.0000227	Paxs	777.99	Joback Method
dvisc	0.0000129	Paxs	874.65	Joback Method
dvisc	0.0000082	Paxs	971.30	Joback Method
dvisc	0.0000057	Paxs	1067.96	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.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=R337487&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R337487&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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