

# Heptacosanal

<b>Inchi:</b>	InChI=1S/C27H54O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-
<b>InchiKey:</b>	UEAAOADMOTTTQM-UHFFFAOYSA-N
<b>Formula:</b>	C27H54O
<b>SMILES:</b>	CCCCCCCCCCCCCCCCCCCCCCCCCCCC=O
<b>Mol. weight [g/mol]:</b>	394.72
<b>CAS:</b>	72934-03-3

## Physical Properties

Property code	Value	Unit	Source
gf	76.94	kJ/mol	Joback Method
hf	-686.19	kJ/mol	Joback Method
hfus	67.98	kJ/mol	Joback Method
hvap	82.42	kJ/mol	Joback Method
log10ws	-10.40		Crippen Method
logp	9.958		Crippen Method
mcvol	392.860	ml/mol	McGowan Method
pc	716.45	kPa	Joback Method
rinpol	2944.40		NIST Webbook
rinpol	2930.00		NIST Webbook
rinpol	2930.00		NIST Webbook
tb	865.82	K	Joback Method
tc	1062.30	K	Joback Method
tf	436.05	K	Joback Method
vc	1.565	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1313.72	J/molxK	865.82	Joback Method
cpg	1420.10	J/molxK	1029.55	Joback Method
cpg	1401.17	J/molxK	996.81	Joback Method
cpg	1381.13	J/molxK	964.06	Joback Method
cpg	1359.92	J/molxK	931.31	Joback Method
cpg	1337.48	J/molxK	898.57	Joback Method

cpg	1437.98	J/molxK	1062.30	Joback Method
dvisc	0.0000405	Paxs	865.82	Joback Method
dvisc	0.0000557	Paxs	794.19	Joback Method
dvisc	0.0000814	Paxs	722.56	Joback Method
dvisc	0.0001294	Paxs	650.93	Joback Method
dvisc	0.0002308	Paxs	579.31	Joback Method
dvisc	0.0004846	Paxs	507.68	Joback Method
dvisc	0.0012982	Paxs	436.05	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=C72934033&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C72934033&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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