

# Pentacosanal

<b>Inchi:</b>	InChI=1S/C25H50O/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>	HAGKFWXVDSAFHB-UHFFFAOYSA-N
<b>Formula:</b>	C25H50O
<b>SMILES:</b>	CCCCCCCCCCCCCCCCCCCCCCCC=O
<b>Mol. weight [g/mol]:</b>	366.66

## Physical Properties

Property code	Value	Unit	Source
gf	60.10	kJ/mol	Joback Method
hf	-644.91	kJ/mol	Joback Method
hfus	62.79	kJ/mol	Joback Method
hvap	77.96	kJ/mol	Joback Method
log10ws	-9.57		Crippen Method
logp	9.178		Crippen Method
mcvol	364.680	ml/mol	McGowan Method
pc	796.18	kPa	Joback Method
rinpol	2738.00		NIST Webbook
rinpol	2733.00		NIST Webbook
tb	820.06	K	Joback Method
tc	1004.01	K	Joback Method
tf	413.51	K	Joback Method
vc	1.452	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1184.27	J/molxK	820.06	Joback Method
cpg	1206.58	J/molxK	850.72	Joback Method
cpg	1227.75	J/molxK	881.38	Joback Method
cpg	1247.84	J/molxK	912.03	Joback Method
cpg	1266.89	J/molxK	942.69	Joback Method
cpg	1284.95	J/molxK	973.35	Joback Method
cpg	1302.07	J/molxK	1004.01	Joback Method
dvisc	0.0016662	Paxs	413.51	Joback Method

dvisc	0.0006299	Paxs	481.27	Joback Method
dvisc	0.0003027	Paxs	549.03	Joback Method
dvisc	0.0001709	Paxs	616.79	Joback Method
dvisc	0.0001081	Paxs	684.54	Joback Method
dvisc	0.0000742	Paxs	752.30	Joback Method
dvisc	0.0000542	Paxs	820.06	Joback Method

## Sources

<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=R313961&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R313961&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>
<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>

## Legend

<b>cp<sub>g</sub>:</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>log<sub>10</sub>ws:</b>	Log <sub>10</sub> of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>m<sub>cvol</sub>:</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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