

# decyl pentacosanoate

<b>Inchi:</b>	InChI=1S/C35H70O2/c1-3-5-7-9-11-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-29-
<b>InchiKey:</b>	DKRVFYWCDRPSBQ-UHFFFAOYSA-N
<b>Formula:</b>	C35H70O2
<b>SMILES:</b>	CCCCCCCCCCCCCCCCCCCCCCCCCCCC(=O)CCCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	522.93

## Physical Properties

Property code	Value	Unit	Source
gf	9.90	kJ/mol	Joback Method
hf	-1010.53	kJ/mol	Joback Method
hfus	89.19	kJ/mol	Joback Method
hvap	102.66	kJ/mol	Joback Method
log10ws	-13.34		Crippen Method
logp	12.662		Crippen Method
mvol	511.450	ml/mol	McGowan Method
pc	486.88	kPa	Joback Method
rinpol	3656.93		NIST Webbook
rinpol	3656.93		NIST Webbook
tb	1076.49	K	Joback Method
tc	1389.63	K	Joback Method
tf	556.37	K	Joback Method
vc	2.019	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1886.65	J/molxK	1076.49	Joback Method
cpg	2019.77	J/molxK	1337.44	Joback Method
cpg	1998.46	J/molxK	1285.25	Joback Method
cpg	1974.78	J/molxK	1233.06	Joback Method
cpg	1948.44	J/molxK	1180.87	Joback Method
cpg	1919.16	J/molxK	1128.68	Joback Method
cpg	2039.01	J/molxK	1389.63	Joback Method
dvisc	0.0000076	Paxs	1076.49	Joback Method

dvisc	0.0000104	Paxs	989.80	Joback Method
dvisc	0.0000154	Paxs	903.12	Joback Method
dvisc	0.0000245	Paxs	816.43	Joback Method
dvisc	0.0000437	Paxs	729.74	Joback Method
dvisc	0.0000910	Paxs	643.06	Joback Method
dvisc	0.0002385	Paxs	556.37	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=R437537&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R437537&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>cp<sub>g</sub>:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>g<sub>f</sub>:</b>	Standard Gibbs free energy of formation
<b>h<sub>f</sub>:</b>	Enthalpy of formation at standard conditions
<b>h<sub>fus</sub>:</b>	Enthalpy of fusion at standard conditions
<b>h<sub>vap</sub>:</b>	Enthalpy of vaporization at standard conditions
<b>log<sub>10</sub>w<sub>s</sub>:</b>	Log <sub>10</sub> of Water solubility in mol/l
<b>log<sub>p</sub>:</b>	Octanol/Water partition coefficient
<b>mc<sub>vol</sub>:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rin<sub>pol</sub>:</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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