

# decyl eicosanoate

<b>Inchi:</b>	InChI=1S/C30H60O2/c1-3-5-7-9-11-13-14-15-16-17-18-19-20-21-22-24-26-28-30(31)32-
<b>InchiKey:</b>	DYFFNHCQVRCXAC-UHFFFAOYSA-N
<b>Formula:</b>	C30H60O2
<b>SMILES:</b>	CCCCCCCCCCCCCCCCCCCC(=O)CCCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	452.80

## Physical Properties

Property code	Value	Unit	Source
gf	-32.20	kJ/mol	Joback Method
hf	-907.33	kJ/mol	Joback Method
hfus	76.24	kJ/mol	Joback Method
hvap	91.53	kJ/mol	Joback Method
log10ws	-11.24		Crippen Method
logp	10.712		Crippen Method
mvol	441.000	ml/mol	McGowan Method
pc	609.06	kPa	Joback Method
rinpol	3153.90		NIST Webbook
rinpol	3153.90		NIST Webbook
tb	962.09	K	Joback Method
tc	1195.84	K	Joback Method
tf	500.02	K	Joback Method
vc	1.740	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1548.95	J/molxK	962.09	Joback Method
cpg	1575.26	J/molxK	1001.05	Joback Method
cpg	1599.65	J/molxK	1040.01	Joback Method
cpg	1622.22	J/molxK	1078.97	Joback Method
cpg	1643.07	J/molxK	1117.92	Joback Method
cpg	1662.31	J/molxK	1156.88	Joback Method
cpg	1680.03	J/molxK	1195.84	Joback Method
dvisc	0.0004872	Paxs	500.02	Joback Method

dvisc	0.0001913	Paxs	577.03	Joback Method
dvisc	0.0000936	Paxs	654.04	Joback Method
dvisc	0.0000532	Paxs	731.05	Joback Method
dvisc	0.0000337	Paxs	808.07	Joback Method
dvisc	0.0000231	Paxs	885.08	Joback Method
dvisc	0.0000168	Paxs	962.09	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=R437493&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R437493&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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