

# Glycerol, 2,3-dimethyl, 1-octadecanoate

<b>Inchi:</b>	InChI=1S/C23H46O4/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-23(24)27-21-22(26)
<b>InchiKey:</b>	PTLGVSQYNQFAG-UHFFFAOYSA-N
<b>Formula:</b>	C23H46O4
<b>SMILES:</b>	CCCCCCCCCCCCCCCCC(=O)OCC(COC)OC
<b>Mol. weight [g/mol]:</b>	386.61

## Physical Properties

Property code	Value	Unit	Source
gf	-303.58	kJ/mol	Joback Method
hf	-1032.57	kJ/mol	Joback Method
hfus	56.97	kJ/mol	Joback Method
hvap	80.38	kJ/mol	Joback Method
log10ws	-6.60		Crippen Method
logp	6.452		Crippen Method
mcvol	354.110	ml/mol	McGowan Method
pc	862.01	kPa	Joback Method
rinpola	2471.00		NIST Webbook
tb	846.33	K	Joback Method
tc	1036.17	K	Joback Method
tf	450.59	K	Joback Method
vc	1.377	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1161.64	J/molxK	846.33	Joback Method
cpg	1182.50	J/molxK	877.97	Joback Method
cpg	1202.06	J/molxK	909.61	Joback Method
cpg	1220.35	J/molxK	941.25	Joback Method
cpg	1237.38	J/molxK	972.89	Joback Method
cpg	1253.16	J/molxK	1004.53	Joback Method
cpg	1267.73	J/molxK	1036.17	Joback Method
dvisc	0.0006323	Paxs	450.59	Joback Method
dvisc	0.0002607	Paxs	516.55	Joback Method

dvisc	0.0001314	Paxs	582.50	Joback Method
dvisc	0.0000761	Paxs	648.46	Joback Method
dvisc	0.0000488	Paxs	714.42	Joback Method
dvisc	0.0000337	Paxs	780.37	Joback Method
dvisc	0.0000247	Paxs	846.33	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=R56496&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R56496&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</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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