

# Propylene glycol, monolaurate

<b>Other names:</b>	2-hydroxypropyl laurate
<b>Inchi:</b>	InChI=1S/C15H30O3/c1-3-4-5-6-7-8-9-10-11-12-15(17)18-13-14(2)16/h14,16H,3-13H2,1
<b>InchiKey:</b>	BHIZVZJETFVJMJ-UHFFFAOYSA-N
<b>Formula:</b>	C15H30O3
<b>SMILES:</b>	CCCCCCCCCCCC(=O)OCC(C)O
<b>Mol. weight [g/mol]:</b>	258.40
<b>CAS:</b>	142-55-2

## Physical Properties

Property code	Value	Unit	Source
gf	-297.76	kJ/mol	Joback Method
hf	-755.24	kJ/mol	Joback Method
hfus	37.96	kJ/mol	Joback Method
hvap	74.43	kJ/mol	Joback Method
log10ws	-4.34		Crippen Method
logp	3.831		Crippen Method
mcvol	235.520	ml/mol	McGowan Method
pc	1584.75	kPa	Joback Method
tb	710.63	K	Joback Method
tc	881.04	K	Joback Method
tf	376.79	K	Joback Method
vc	0.912	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	693.58	J/molxK	710.63	Joback Method
cpg	709.09	J/molxK	739.03	Joback Method
cpg	723.89	J/molxK	767.43	Joback Method
cpg	737.97	J/molxK	795.83	Joback Method
cpg	751.37	J/molxK	824.23	Joback Method
cpg	764.10	J/molxK	852.63	Joback Method
cpg	776.17	J/molxK	881.04	Joback Method
dvisc	0.0034600	Paxs	376.79	Joback Method

dvisc	0.0009296	Paxs	432.43	Joback Method
dvisc	0.0003370	Paxs	488.07	Joback Method
dvisc	0.0001504	Paxs	543.71	Joback Method
dvisc	0.0000780	Paxs	599.35	Joback Method
dvisc	0.0000452	Paxs	654.99	Joback Method
dvisc	0.0000285	Paxs	710.63	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C142552&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C142552&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>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</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>h<sub>vap</sub>:</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>log<sub>p</sub>:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<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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