

# Dodecanamide, N,N-diethyl-

<b>Other names:</b>	Diethylauramide N,N-Diethyldodecanamide N,N-Diethylauramide N,N-Diethylauramide Nopcogen 14-I
<b>Inchi:</b>	InChI=1S/C16H33NO/c1-4-7-8-9-10-11-12-13-14-15-16(18)17(5-2)6-3/h4-15H2,1-3H3
<b>InchiKey:</b>	CWNSVVHTTQBGQB-UHFFFAOYSA-N
<b>Formula:</b>	C16H33NO
<b>SMILES:</b>	CCCCCCCCCCCC(=O)N(CC)CC
<b>Mol. weight [g/mol]:</b>	255.44
<b>CAS:</b>	3352-87-2

## Physical Properties

Property code	Value	Unit	Source
gf	65.70	kJ/mol	Joback Method
hf	-418.62	kJ/mol	Joback Method
hfus	41.82	kJ/mol	Joback Method
hvap	60.00	kJ/mol	Joback Method
log10ws	-4.87		Crippen Method
logp	4.776		Crippen Method
mcvol	247.850	ml/mol	McGowan Method
pc	1378.88	kPa	Joback Method
tb	631.79	K	Joback Method
tc	798.03	K	Joback Method
tf	352.48	K	Joback Method
vc	0.956	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	685.29	J/molxK	631.79	Joback Method
cpg	703.72	J/molxK	659.50	Joback Method
cpg	721.33	J/molxK	687.20	Joback Method
cpg	738.15	J/molxK	714.91	Joback Method

cpg	754.21	J/mol×K	742.62	Joback Method
cpg	769.54	J/mol×K	770.33	Joback Method
cpg	784.16	J/mol×K	798.03	Joback Method

## Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	439.70	K	0.30	NIST Webbook

## 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=C3352872&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C3352872&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>cpg:</b>	Ideal gas heat capacity
<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>tb:</b>	Normal Boiling Point Temperature
<b>tbrp:</b>	Boiling point at reduced pressure
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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