

# Pentanamide, N,N-didecyl-

<b>Inchi:</b>	InChI=1S/C25H51NO/c1-4-7-10-12-14-16-18-20-23-26(25(27)22-9-6-3)24-21-19-17-15-1
<b>InchiKey:</b>	GHTFJDSNDABPBM-UHFFFAOYSA-N
<b>Formula:</b>	C25H51NO
<b>SMILES:</b>	CCCCCCCCCN(CCCCCCCCCC)C(=O)CCCC
<b>Mol. weight [g/mol]:</b>	381.68

## Physical Properties

Property code	Value	Unit	Source
gf	141.48	kJ/mol	Joback Method
hf	-604.38	kJ/mol	Joback Method
hfus	65.13	kJ/mol	Joback Method
hvap	80.03	kJ/mol	Joback Method
log10ws	-8.63		Crippen Method
logp	8.287		Crippen Method
mvol	374.660	ml/mol	McGowan Method
pc	790.37	kPa	Joback Method
rinpol	2707.00		NIST Webbook
rinpol	2707.00		NIST Webbook
tb	837.71	K	Joback Method
tc	1025.76	K	Joback Method
tf	453.91	K	Joback Method
vc	1.460	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1231.36	J/mol×K	837.71	Joback Method
cpg	1253.97	J/mol×K	869.05	Joback Method
cpg	1275.38	J/mol×K	900.39	Joback Method
cpg	1295.66	J/mol×K	931.74	Joback Method
cpg	1314.85	J/mol×K	963.08	Joback Method
cpg	1333.02	J/mol×K	994.42	Joback Method
cpg	1350.22	J/mol×K	1025.76	Joback Method

# Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U308187&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U308187&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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>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>hvpap:</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>rinppl:</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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