

# Urea, N-cyclohexyl-N'-phenyl-

<b>Inchi:</b>	InChI=1S/C13H18N2O/c16-13(14-11-7-3-1-4-8-11)15-12-9-5-2-6-10-12/h1,3-4,7-8,12H,2
<b>InchiKey:</b>	WPLYTRWMCWBZEN-UHFFFAOYSA-N
<b>Formula:</b>	C13H18N2O
<b>SMILES:</b>	O=C(Nc1ccccc1)NC1CCCCC1
<b>Mol. weight [g/mol]:</b>	218.29
<b>CAS:</b>	886-59-9

## Physical Properties

Property code	Value	Unit	Source
gf	245.30	kJ/mol	Joback Method
hf	-26.44	kJ/mol	Joback Method
hfus	27.10	kJ/mol	Joback Method
hvap	66.86	kJ/mol	Joback Method
log10ws	-3.94		Crippen Method
logp	3.141		Crippen Method
mcvol	180.940	ml/mol	McGowan Method
pc	2950.48	kPa	Joback Method
tb	697.28	K	Joback Method
tc	935.97	K	Joback Method
tf	425.32	K	Joback Method
vc	0.664	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	516.77	J/molxK	697.28	Joback Method
cpg	534.54	J/molxK	737.06	Joback Method
cpg	550.88	J/molxK	776.84	Joback Method
cpg	565.86	J/molxK	816.62	Joback Method
cpg	579.55	J/molxK	856.41	Joback Method
cpg	592.02	J/molxK	896.19	Joback Method
cpg	603.35	J/molxK	935.97	Joback Method

# Sources

<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=C886599&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C886599&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>
<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>

# 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>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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