

# Diphenylcarbazine

<b>Other names:</b>	Carbonic dihydrazide, 2,2'-diphenyl- Carbohydrazide, 1,5-diphenyl- sym-Diphenylcarbazine 1,5-Diphenylcarbazine 2,2'-Diphenylcarbazine 1,5-Diphenylcarbohydrazide DPC s-Diphenyl carbazine 1,5-Diphenylcabohydrazide 1,5-Diphenylcarbohydrazine 2,2'-Diphenylcarbonic dihydrazide N,N'-Diphenylcarbazine NSC 5058 N",n""-diphenylcarbonohydrazide 1,5-diphenylcarbonohydrazide
<b>Inchi:</b>	InChI=1S/C13H14N4O/c18-13(16-14-11-7-3-1-4-8-11)17-15-12-9-5-2-6-10-12/h1-10,14-
<b>InchiKey:</b>	KSPIHGBHKVISFI-UHFFFAOYSA-N
<b>Formula:</b>	C13H14N4O
<b>SMILES:</b>	O=C(NNc1cccc1)NNc1cccc1
<b>Mol. weight [g/mol]:</b>	242.28
<b>CAS:</b>	140-22-7

## Physical Properties

Property code	Value	Unit	Source
gf	512.04	kJ/mol	Joback Method
hf	262.71	kJ/mol	Joback Method
hfus	39.50	kJ/mol	Joback Method
hvap	81.57	kJ/mol	Joback Method
log10ws	-3.83		Crippen Method
logp	2.340		Crippen Method
mcvol	188.000	ml/mol	McGowan Method
pc	3505.43	kPa	Joback Method
tb	804.75	K	Joback Method
tc	1044.87	K	Joback Method
tf	549.68	K	Joback Method
vc	0.694	m3/kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	540.23	J/mol×K	804.75	Joback Method
cpg	552.32	J/mol×K	844.77	Joback Method
cpg	563.30	J/mol×K	884.79	Joback Method
cpg	573.27	J/mol×K	924.81	Joback Method
cpg	582.30	J/mol×K	964.83	Joback Method
cpg	590.49	J/mol×K	1004.85	Joback Method
cpg	597.93	J/mol×K	1044.87	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C140227&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C140227&amp;Units=SI</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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