

# Benzoic acid, 2-phenylhydrazide

**Other names:**

Benzoic acid N2-phenylhydrazide  
«beta»-(Benzoyl)phenylhydrazine  
Benzoic acid, phenyl hydrazide  
N-Benzoyl-N'-phenylhydrazine  
1-Benzoyl-2-phenylhydrazine  
Benzoic acid phenylhydrazone  
N'-Phenylbenzohydrazide  
N'-Phenylbenzoylhydrazide  
Benzoyl 2-phenylhydrazide  
Benzoic hydrazide, N(«beta»)-phenyl-  
Benzoic acid, N'-phenylhydrazide  
2'-Phenylbenzohydrazide  
N-Anilinobenzamide  
NSC 239394

**Inchi:**

InChI=1S/C13H12N2O/c16-13(11-7-3-1-4-8-11)15-14-12-9-5-2-6-10-12/h1-10,14H,(H,15

**InchiKey:**

CKLPECFHCLIIYKN-UHFFFAOYSA-N

**Formula:**

C13H12N2O

**SMILES:**

O=C(NNc1ccccc1)c1ccccc1

**Mol. weight [g/mol]:**

212.25

**CAS:**

532-96-7

## Physical Properties

Property code	Value	Unit	Source
gf	333.26	kJ/mol	Joback Method
hf	155.77	kJ/mol	Joback Method
hfus	29.30	kJ/mol	Joback Method
hvap	68.70	kJ/mol	Joback Method
log10ws	-3.63		Crippen Method
logp	2.443		Crippen Method
mvol	168.040	ml/mol	McGowan Method
pc	3399.94	kPa	Joback Method
tb	704.41	K	Joback Method
tc	950.32	K	Joback Method
tf	444.36	K	Joback Method
vc	0.624	m3/kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	440.45	J/mol×K	704.41	Joback Method
cpg	454.21	J/mol×K	745.39	Joback Method
cpg	466.76	J/mol×K	786.38	Joback Method
cpg	478.18	J/mol×K	827.36	Joback Method
cpg	488.54	J/mol×K	868.35	Joback Method
cpg	497.95	J/mol×K	909.33	Joback Method
cpg	506.48	J/mol×K	950.32	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=C532967&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C532967&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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