

4-Phenylbenzhydrazide

Other names:	p-Phenyl benzhydrazide 4-Biphenylcarboxylic acid hydrazide [1,1'-Biphenyl]-4-carboxylic acid, hydrazide 1,1'-Bbiphenyl-4-carboxylic acid, hydrazide Biphenyl-4-carbohydrazide [1,1'-biphenyl]-4-carbohydrazide
Inchi:	InChI=1S/C13H12N2O/c14-15-13(16)12-8-6-11(7-9-12)10-4-2-1-3-5-10/h1-9H,14H2,(H,1
InchiKey:	QEUAQXSDDNDOTG-UHFFFAOYSA-N
Formula:	C13H12N2O
SMILES:	<chem>NNC(=O)c1ccc(-c2ccccc2)cc1</chem>
Mol. weight [g/mol]:	212.25
CAS:	18622-23-6

Physical Properties

Property code	Value	Unit	Source
gf	300.69	kJ/mol	Joback Method
hf	124.62	kJ/mol	Joback Method
hfus	29.01	kJ/mol	Joback Method
hvap	73.57	kJ/mol	Joback Method
log10ws	-4.42		Crippen Method
logp	1.957		Crippen Method
mcvol	168.040	ml/mol	McGowan Method
pc	3517.91	kPa	Joback Method
tb	731.75	K	Joback Method
tc	986.54	K	Joback Method
tf	487.48	K	Joback Method
vc	0.618	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	446.89	J/mol×K	731.75	Joback Method
cpg	460.00	J/mol×K	774.22	Joback Method
cpg	471.92	J/mol×K	816.68	Joback Method

cpg	482.75	J/mol×K	859.15	Joback Method
cpg	492.55	J/mol×K	901.61	Joback Method
cpg	501.41	J/mol×K	944.08	Joback Method
cpg	509.43	J/mol×K	986.54	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C18622236&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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