

Benzoic acid, 2-benzoylhydrazide

Other names:	Hydrazine, 1,2-dibenzoyl- Dibenzoylhydrazine N,N'-Dibenzoylhydrazine N2-Benzoylbenzoic acid hydrazide 1,2-Dibenzoylhydrazine N'-benzoylbenzohydrazide
Inchi:	InChI=1S/C14H12N2O2/c17-13(11-7-3-1-4-8-11)15-16-14(18)12-9-5-2-6-10-12/h1-10H,(
InchiKey:	GRRIYLZJLGTQJX-UHFFFAOYSA-N
Formula:	C14H12N2O2
SMILES:	O=C(NNC(=O)c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	240.26
CAS:	787-84-8

Physical Properties

Property code	Value	Unit	Source
chs	-7010.30 ± 1.30	kJ/mol	NIST Webbook
chs	-7010.30 ± 6.70	kJ/mol	NIST Webbook
chs	-7022.40 ± 6.30	kJ/mol	NIST Webbook
gf	212.76	kJ/mol	Joback Method
hf	22.55	kJ/mol	Joback Method
hfs	-213.80 ± 1.30	kJ/mol	NIST Webbook
hfs	-202.00	kJ/mol	NIST Webbook
hfus	33.49	kJ/mol	Joback Method
hvap	77.67	kJ/mol	Joback Method
log10ws	-3.96		Crippen Method
logp	1.761		Crippen Method
mvol	183.700	ml/mol	McGowan Method
pc	3272.78	kPa	Joback Method
tb	781.16	K	Joback Method
tc	1026.92	K	Joback Method
tf	505.56	K	Joback Method
vc	0.685	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	503.59	J/mol×K	781.16	Joback Method
cpg	515.77	J/mol×K	822.12	Joback Method
cpg	526.79	J/mol×K	863.08	Joback Method
cpg	536.74	J/mol×K	904.04	Joback Method
cpg	545.71	J/mol×K	945.00	Joback Method
cpg	553.79	J/mol×K	985.96	Joback Method
cpg	561.06	J/mol×K	1026.92	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C787848&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase 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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