1,2-Diacetyl-1,2-diphenylhydrazine

Other names: 1,2-Diacetyl-1,2-diphenylhydrazine
Inchi: InChI=1S/C16H16N2O2/c19-15(11-13-7-3-1-4-8-13)17-18-16(20)12-14-9-5-2-6-10-14/h1
InchiKey: KTANCLWFWIVXSU-UHFFFAOYSA-N
Formula: C16H16N2O2
SMILES: O=C(Cc1ccccc1)NNC(=O)Cc1ccccc1
Mol. weight [g/mol]: 268.32

Physical Properties

Property code	Value	Unit	Source
chs	-8394.40 ± 4.60	kJ/mol	NIST Webbook
hf	-122.97	kJ/mol	Cheméo Relay (1.0)
hfus	38.67	kJ/mol	Joback Method
hvap	110.95	kJ/mol	Cheméo Relay (1.0)
ie	8.58	eV	Cheméo Relay (1.0)
log10ws	-3.43		Cheméo Relay (1.0)
logp	1.619		Crippen Method
mcvol	211.880	ml/mol	McGowan Method
pc	2657.03	kPa	Joback Method
tb	626.34	K	Cheméo Relay (1.0)
tc	946.45	K	Cheméo Relay (1.0)
tf	425.07	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	611.47	J/mol×K	826.92	Joback Method
cpg	624.25	J/mol×K	866.44	Joback Method
cpg	635.89	J/mol×K	905.95	Joback Method
cpg	646.49	J/mol×K	945.47	Joback Method
cpg	656.13	J/mol×K	984.99	Joback Method
cpg	664.89	J/mol×K	1024.50	Joback Method
cpg	672.86	J/mol×K	1064.02	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C793259&Units=SI
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
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
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