2,3'-Bipyridine, 1',3,4,4',5,5',6,6'-octahydro-

Other names: Hystrine
Inchi: InChI=1S/C10H16N2/c1-2-7-12-10(5-1)9-4-3-6-11-8-9/h8,11H,1-7H2
InchiKey: KFDHPHHLOBEYFQ-UHFFFAOYSA-N
Formula: C10H16N2
SMILES: C1=C(C2=NCCCC2)CCCN1
Mol. weight [g/mol]: 164.25
CAS: 18017-50-0

Physical Properties

Property code	Value	Unit	Source
gf	342.79	kJ/mol	Joback Method
hf	100.99	kJ/mol	Joback Method
hfus	19.58	kJ/mol	Joback Method
hvap	54.21	kJ/mol	Joback Method
log10ws	-2.50		Crippen Method
logp	1.879		Crippen Method
mcvol	141.400	ml/mol	McGowan Method
pc	3745.38	kPa	Joback Method
rinpol	1663.00		NIST Webbook
tb	587.17	K	Joback Method
tc	849.31	K	Joback Method
tf	428.83	K	Joback Method
vc	0.521	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	367.58	J/mol×K	587.17	Joback Method
cpg	388.88	J/mol×K	630.86	Joback Method
cpg	408.62	J/mol×K	674.55	Joback Method
cpg	426.84	J/mol×K	718.24	Joback Method
cpg	443.56	J/mol×K	761.93	Joback Method
cpg	458.79	J/mol×K	805.62	Joback Method
cpg	472.57	J/mol×K	849.31	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C18017500&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume