2(1H)-Quinolinone

Other names:	Carbostyril
	«alpha»-Hydroxyquinoline
	«alpha»-Quinolone
	o-Aminocinnamic acid lactam
	2(1H)-Quinolone
	2-Hydroxyquinoline
	2-Quinolinol
	1H-Quinolin-2-one
	2-Quinolinone
	2-Quinolone
	NSC 156783
Inchi:	InChI=1S/C9H7NO/c11-9-6-5-7-3-1-2-4-8(7)10-9/h1-6H,(H,10,11)
InchiKey:	LISFMEBWQUVKPJ-UHFFFAOYSA-N
Formula:	C9H7NO
SMILES:	O=c1ccc2ccccc2[nH]1
Mol. weight [g/mol]:	145.16
CAS:	59-31-4

Physical Properties

Property code	Value	Unit	Source
chs	-4397.10 ± 2.00	kJ/mol	NIST Webbook
hf	-25.50 ± 2.40	kJ/mol	NIST Webbook
hfs	-144.90 ± 2.30	kJ/mol	NIST Webbook
hsub	119.40 ± 0.60	kJ/mol	NIST Webbook
hsub	119.40 ± 0.60	kJ/mol	NIST Webbook
ie	8.40	eV	NIST Webbook
log10ws	-1.92		Crippen Method
logp	1.046		Crippen Method
mcvol	110.300	ml/mol	McGowan Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	115.20 ± 0.60	kJ/mol	382.50	NIST Webbook

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C59314&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

chs:	Standard solid enthalpy of combustion
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase enthalpy of formation at standard conditions
hsub:	Enthalpy of sublimation at standard conditions
hsubt:	Enthalpy of sublimation at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume