Cycloserine

Other names:

(+)-4-Amino-3-isoxazolidinone
(+)-Cycloserine
3-Isoxazolidinone, 4-amino-, (+)-
3-Isoxazolidinone, 4-amino-, (R)-
3-Isoxazolidinone, 4-amino-, d-
4-Amino-3-isoxazolidinone, (R)-
4-Amino-3-isoxazolidinone, D-
4-Isoxazolidinamine, 3-oxo-, (D)-
Cicloserina
Closina
Cyclo-D-serine
Cyclorin
Cycloserin
Cycloserine, D-
D-4-Amino-3-isossazolidone
D-4-Amino-3-isoxazolidinone
D-4-Amino-3-isoxazolidone
D-CS
D-Cycloserine
D-Oxamicina
D-Oxamycin
E-733-A
Farmiserina
I-1431
K-300
Micoserina
Miroserina
Miroseryn
NJ-21
NSC 154851
Novoserin
Orientomycin
Oxamicina
Oxamycin
Oxymycin
PA 94
RO-1-9213
Seromycin
Tebemicina
Tisomycin

	Wasserina
	«alpha»-Cycloserine
	Â«alphaÂ»-Cycloserine
Inchi:	InChI=1S/C3H6N2O2/c4-2-1-7-5-3(2)6/h2H,1,4H2,(H,5,6)/t2-/m0/s1
InchiKey:	DYDCUQKUCUHJBH-REOHCLBHSA-N
Formula:	C3H6N2O2
SMILES:	NC1CONC1=O
Mol. weight [g/mol]:	102.09
CAS:	68-41-7

Physical Properties

Property code	Value	Unit	Source
gf	-43.62	kJ/mol	Joback Method
hf	-242.87	kJ/mol	Joback Method
hfus	19.74	kJ/mol	Joback Method
hvap	48.69	kJ/mol	Joback Method
log10ws	-9.00e-03		Aqueous and cosolvent solubility data for drug-like organic compounds
logp	-1.625		Crippen Method
mcvol	69.670	ml/mol	McGowan Method
pc	6740.71	kPa	Joback Method
tb	499.17	K	Joback Method
tc	746.44	K	Joback Method
tf	417.55	K	Joback Method
vc	0.238	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	157.61	J/mol×K	499.17	Joback Method
cpg	167.57	J/mol×K	540.38	Joback Method
cpg	177.13	J/mol×K	581.59	Joback Method
cpg	186.24	J/mol×K	622.80	Joback Method
cpg	194.87	J/mol×K	664.02	Joback Method
cpg	203.00	J/mol×K	705.23	Joback Method
cpg	210.57	J/mol×K	746.44	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C68417&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Aqueous and cosolvent solubility data for drug-like organic compounds:	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2751500/

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