

Cyclamic acid

Other names:	Cyclohexanesulfamic acid Hexamic acid Cyclohexylsulfamic acid Sulfamic acid, cyclohexyl- Cyclohexylamidosulfuric acid Cyclohexylaminesulfonic acid N-Cyclohexylsulfamic acid Sucaryl Sucaryl acid Zyklamat Cyclohexanesulphamic acid Cyclohexylamidosulphuric acid Cyclohexylaminesulphonic acid Cyclohexylsulphamic acid N-Cyclohexylsulphamic acid Cyclamate NSC 220327 Polycat 200 Sulfamic acid, N-cyclohexyl-
Inchi:	InChI=1S/C6H13NO3S/c8-11(9,10)7-6-4-2-1-3-5-6/h6-7H,1-5H2,(H,8,9,10)
InchiKey:	HCAJEUSONLESMK-UHFFFAOYSA-N
Formula:	C6H13NO3S
SMILES:	O=S(=O)(O)NC1CCCCC1
Mol. weight [g/mol]:	179.24
CAS:	100-88-9

Physical Properties

Property code	Value	Unit	Source
gf	-491.88	kJ/mol	Joback Method
hf	-664.96	kJ/mol	Joback Method
hfus	23.70	kJ/mol	Joback Method
hvap	71.13	kJ/mol	Joback Method
log10ws	-1.67		Crippen Method
logp	0.712		Crippen Method
mcvol	128.480	ml/mol	McGowan Method
pc	5661.74	kPa	Joback Method
tb	546.36	K	Joback Method

tc	737.81	K	Joback Method
tf	316.80	K	Joback Method
vc	0.484	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	313.80	J/mol×K	546.36	Joback Method
cpg	327.16	J/mol×K	578.27	Joback Method
cpg	339.81	J/mol×K	610.18	Joback Method
cpg	351.75	J/mol×K	642.08	Joback Method
cpg	362.99	J/mol×K	673.99	Joback Method
cpg	373.53	J/mol×K	705.90	Joback Method
cpg	383.37	J/mol×K	737.81	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C100889&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

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

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