Acetamide, N-(2,5-dihydro-5-oxo-2-furanyl)-

Other names:	Acetamide, N-(2,5-dihydro-5-oxo-2-furyl)-
	2(5H)-Furanone, 5-acetamido-
	4-Acetamido-4-hydroxy-2-butenoic acid-«gamma»-lactone
	5-Acetamido-2(5)-furanone
	Butenolide
	Crotonic acid, 4-acetamido-4-hyroxy-, gamma-lactone
Inchi:	InChI=1S/C6H7NO3/c1-4(8)7-5-2-3-6(9)10-5/h2-3,5H,1H3,(H,7,8)
InchiKey:	HUSDLVGPEKVWAL-UHFFFAOYSA-N
Formula:	C6H7NO3
SMILES:	CC(=O)NC1C=CC(=O)O1
Mol. weight [g/mol]:	141.12
CAS:	16275-44-8

Physical Properties

Property code	Value	Unit	Source
gf	-182.09	kJ/mol	Joback Method
hf	-377.72	kJ/mol	Joback Method
hfus	20.64	kJ/mol	Joback Method
hvap	51.44	kJ/mol	Joback Method
log10ws	-0.52		Crippen Method
logp	-0.438		Crippen Method
mcvol	99.230	ml/mol	McGowan Method
pc	4590.15	kPa	Joback Method
tb	549.93	K	Joback Method
tc	779.84	K	Joback Method
tf	366.42	K	Joback Method
vc	0.367	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	234.16	J/mol×K	549.93	Joback Method
cpg	245.47	J/mol×K	588.25	Joback Method
cpg	256.14	J/mol×K	626.57	Joback Method

cpg	266.16	J/mol×K	664.88	Joback Method
cpg	275.53	J/mol×K	703.20	Joback Method
cpg	284.24	J/mol×K	741.52	Joback Method
cpg	292.29	J/mol×K	779.84	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=C16275448&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume