Glutamic acid, N-acetyl-, diethyl ester, L-

Other names: N-acetyl-(l)-glutamic acid, diethyl ester
Inchi: InChI=1S/C11H19NO5/c1-4-16-10(14)7-6-9(12-8(3)13)11(15)17-5-2/h9H,4-7H2,1-3H3,(H
InchiKey: FBAOQDIATMHNAD-UHFFFAOYSA-N
Formula: C11H19O5
SMILES: CCOC(=O)CCC(NC(C)=O)C(=O)OCC
Mol. weight [g/mol]: 231.27
CAS: 1446-19-1

Physical Properties

Property code	Value	Unit	Source
gf	-468.07	kJ/mol	Joback Method
hf	-824.36	kJ/mol	Joback Method
hfus	32.99	kJ/mol	Joback Method
hvap	71.19	kJ/mol	Joback Method
log10ws	-1.23		Crippen Method
logp	0.397		Crippen Method
mcvol	192.280	ml/mol	McGowan Method
pc	2271.90	kPa	Joback Method
tb	707.26	K	Joback Method
tc	898.07	K	Joback Method
tf	445.64	K	Joback Method
vc	0.735	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	537.44	J/mol×K	707.26	Joback Method
cpg	550.35	J/mol×K	739.06	Joback Method
cpg	562.51	J/mol×K	770.86	Joback Method
cpg	573.95	J/mol×K	802.67	Joback Method
cpg	584.64	J/mol×K	834.47	Joback Method
cpg	594.59	J/mol×K	866.27	Joback Method
cpg	603.80	J/mol×K	898.07	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=C1446191&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