Glutaric anhydride,2-acetamido

Inchi: InChI=1S/C7H9NO4/c1-4(9)8-5-2-3-6(10)12-7(5)11/h5H,2-3H2,1H3,(H,8,9)
InchiKey: OWOHWGNSBBGHTI-UHFFFAOYSA-N
Formula: C7H9NO4
SMILES: CC(=O)NC1CCC(=O)OC1=O
Mol. weight [g/mol]: 171.15
CAS: 38628-68-1

Physical Properties

Property code	Value	Unit	Source
gf	-338.32	kJ/mol	Joback Method
hf	-600.00	kJ/mol	Joback Method
hfus	19.42	kJ/mol	Joback Method
hvap	57.79	kJ/mol	Joback Method
log10ws	-0.36		Crippen Method
logp	-0.645		Crippen Method
mcvol	119.190	ml/mol	McGowan Method
pc	4173.09	kPa	Joback Method
tb	645.74	K	Joback Method
tc	890.01	K	Joback Method
tf	441.63	K	Joback Method
vc	0.436	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	323.18	J/mol×K	645.74	Joback Method
cpg	337.15	J/mol×K	686.45	Joback Method
cpg	350.19	J/mol×K	727.16	Joback Method
cpg	362.25	J/mol×K	767.88	Joback Method
cpg	373.27	J/mol×K	808.59	Joback Method
cpg	383.18	J/mol×K	849.30	Joback Method
cpg	391.93	J/mol×K	890.01	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C38628681&Units=SI

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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