Triethylsuccinic anhydride

Inchi: InChI=1S/C10H16O3/c1-4-7-8(11)13-9(12)10(7,5-2)6-3/h7H,4-6H2,1-3H3
InchiKey: VKQGABOHCZRGOR-UHFFFAOYSA-N
Formula: C10H16O3
SMILES: CCC1C(=O)OC(=O)C1(CC)CC
Mol. weight [g/mol]: 184.23
CAS: 75125-36-9

Physical Properties

Property code	Value	Unit	Source
chl	-5476.10 ± 2.70	kJ/mol	NIST Webbook
gf	-274.63	kJ/mol	Joback Method
hf	-601.75	kJ/mol	Joback Method
hfus	17.36	kJ/mol	Joback Method
hvap	49.66	kJ/mol	Joback Method
log10ws	-2.06		Crippen Method
logp	1.902		Crippen Method
mcvol	149.910	ml/mol	McGowan Method
pc	2698.60	kPa	Joback Method
tb	601.64	K	Joback Method
tc	828.13	K	Joback Method
tf	396.03	K	Joback Method
vc	0.569	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	402.17	J/mol×K	601.64	Joback Method
cpg	419.12	J/mol×K	639.39	Joback Method
cpg	435.29	J/mol×K	677.14	Joback Method
cpg	450.75	J/mol×K	714.88	Joback Method
cpg	465.54	J/mol×K	752.63	Joback Method
cpg	479.74	J/mol×K	790.38	Joback Method
cpg	493.39	J/mol×K	828.13	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C75125369&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

chl:	Standard liquid enthalpy of combustion
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