Glutaric acid, monoamide, N-dodecyl-, ethyl ester

Inchi: InChI=1S/C19H37NO3/c1-3-5-6-7-8-9-10-11-12-13-17-20-18(21)15-14-16-19(22)23-4-2/h
InchiKey: BMBNYBYXVVDAMH-UHFFFAOYSA-N
Formula: C19H37NO3
SMILES: CCCCCCCCCCCCNC(=O)CCCC(=O)OCC
Mol. weight [g/mol]: 327.50

Physical Properties

Property code	Value	Unit	Source
gf	-164.35	kJ/mol	Joback Method
hf	-739.40	kJ/mol	Joback Method
hfus	54.45	kJ/mol	Joback Method
hvap	80.23	kJ/mol	Joback Method
log10ws	-5.60		Crippen Method
logp	4.757		Crippen Method
mcvol	297.560	ml/mol	McGowan Method
pc	1172.83	kPa	Joback Method
rinpol	2926.00		NIST Webbook
tb	814.45	K	Joback Method
tc	1000.00	K	Joback Method
tf	478.64	K	Joback Method
vc	1.165	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	941.58	J/mol×K	814.45	Joback Method
cpg	959.23	J/mol×K	845.37	Joback Method
cpg	975.87	J/mol×K	876.30	Joback Method
cpg	991.54	J/mol×K	907.22	Joback Method
cpg	1006.27	J/mol×K	938.15	Joback Method
cpg	1020.07	J/mol×K	969.07	Joback Method
cpg	1032.98	J/mol×K	1000.00	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360865&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume