Glutaric acid, monoamide, N-(2-biphenyl)-, tetradecyl ester

Inchi: InChI=1S/C31H45NO3/c1-2-3-4-5-6-7-8-9-10-11-12-18-26-35-31(34)25-19-24-30(33)32-
InchiKey: TUBQMCSSRBWCOS-UHFFFAOYSA-N
Formula: C31H45NO3
SMILES: CCCCCCCCCCCCCCOC(=O)CCCC(=O)Nc1ccccc1-c1ccccc1
Mol. weight [g/mol]: 479.69

Physical Properties

Property code	Value	Unit	Source
gf	151.88	kJ/mol	Joback Method
hf	-525.49	kJ/mol	Joback Method
hfus	73.22	kJ/mol	Joback Method
hvap	112.15	kJ/mol	Joback Method
log10ws	-10.26		Crippen Method
logp	8.707		Crippen Method
mcvol	419.120	ml/mol	McGowan Method
pc	852.47	kPa	Joback Method
rinpol	3373.00		NIST Webbook
rinpol	3373.00		NIST Webbook
tb	1147.35	K	Joback Method
tc	1413.90	K	Joback Method
tf	679.24	K	Joback Method
vc	1.621	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1479.17	J/mol×K	1147.35	Joback Method
cpg	1495.29	J/mol×K	1191.78	Joback Method
cpg	1509.80	J/mol×K	1236.20	Joback Method
cpg	1522.86	J/mol×K	1280.63	Joback Method
cpg	1534.65	J/mol×K	1325.05	Joback Method
cpg	1545.33	J/mol×K	1369.48	Joback Method
cpg	1555.08	J/mol×K	1413.90	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=U360052&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume