Glutaric acid, monoamide, N-(2-phenylpropyl)-, pentyl ester

Inchi: InChI=1S/C19H29NO3/c1-3-4-8-14-23-19(22)13-9-12-18(21)20-15-16(2)17-10-6-5-7-11-
InchiKey: VQFDYMOFHZTSQP-UHFFFAOYSA-N
Formula: C19H29NO3
SMILES: CCCCCOC(=O)CCCC(=O)NCC(C)c1ccccc1
Mol. weight [g/mol]: 319.44

Physical Properties

Property code	Value	Unit	Source
gf	-54.38	kJ/mol	Joback Method
hf	-508.15	kJ/mol	Joback Method
hfus	44.97	kJ/mol	Joback Method
hvap	82.11	kJ/mol	Joback Method
log10ws	-4.67		Crippen Method
logp	3.810		Crippen Method
mcvol	273.800	ml/mol	McGowan Method
pc	1501.15	kPa	Joback Method
rinpol	2531.00		NIST Webbook
rinpol	2531.00		NIST Webbook
tb	840.69	K	Joback Method
tc	1044.46	K	Joback Method
tf	490.06	K	Joback Method
vc	1.050	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	850.20	J/mol×K	840.69	Joback Method
cpg	865.99	J/mol×K	874.65	Joback Method
cpg	880.66	J/mol×K	908.61	Joback Method
cpg	894.28	J/mol×K	942.58	Joback Method
cpg	906.87	J/mol×K	976.54	Joback Method
cpg	918.49	J/mol×K	1010.50	Joback Method
cpg	929.16	J/mol×K	1044.46	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=U360822&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