Glutaric acid, monoamide, N,N-di(4-methylphenyl)-, pentyl ester

Inchi: InChI=1S/C24H31NO3/c1-4-5-6-18-28-24(27)9-7-8-23(26)25(21-14-10-19(2)11-15-21)22

InchiKey: UUODRBPOVXJODV-UHFFFAOYSA-N

Formula: C24H31NO3

SMILES: CCCCCOC(=O)CCCC(=O)N(c1ccc(C)cc1)c1ccc(C)cc1

Mol. weight [g/mol]: 381.51

Physical Properties

Property code	Value	Unit	Source
gf	104.70	kJ/mol	Joback Method
hf	-378.42	kJ/mol	Joback Method
hfus	52.63	kJ/mol	Joback Method
hvap	92.84	kJ/mol	Joback Method
log10ws	-6.53		Crippen Method
logp	5.872		Crippen Method
mcvol	320.490	ml/mol	McGowan Method
pc	1291.14	kPa	Joback Method
rinpol	2896.00		NIST Webbook
rinpol	2896.00		NIST Webbook
tb	954.44	K	Joback Method
tc	1176.69	K	Joback Method
tf	592.68	K	Joback Method
vc	1.212	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1030.51	J/mol×K	954.44	Joback Method
cpg	1045.65	J/mol×K	991.48	Joback Method
cpg	1059.52	J/mol×K	1028.52	Joback Method
cpg	1072.21	J/mol×K	1065.57	Joback Method
cpg	1083.78	J/mol×K	1102.61	Joback Method
cpg	1094.30	J/mol×K	1139.65	Joback Method
cpg	1103.86	J/mol×K	1176.69	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=U360233&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