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

Inchi: InChI=1S/C29H41NO3/c1-4-5-6-7-8-9-10-11-23-33-29(32)14-12-13-28(31)30(26-19-15-2

InchiKey: JOBQNKHRUQVUEN-UHFFFAOYSA-N

Formula: C29H41NO3

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

Mol. weight [g/mol]: 451.64

Physical Properties

Property code	Value	Unit	Source
gf	146.80	kJ/mol	Joback Method
hf	-481.62	kJ/mol	Joback Method
hfus	65.58	kJ/mol	Joback Method
hvap	103.97	kJ/mol	Joback Method
log10ws	-8.63		Crippen Method
logp	7.822		Crippen Method
mcvol	390.940	ml/mol	McGowan Method
pc	939.22	kPa	Joback Method
rinpol	3402.00		NIST Webbook
rinpol	3402.00		NIST Webbook
tb	1068.84	K	Joback Method
tc	1309.14	K	Joback Method
tf	649.03	K	Joback Method
vc	1.492	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1338.34	J/mol×K	1068.84	Joback Method
cpg	1354.48	J/mol×K	1108.89	Joback Method
cpg	1369.17	J/mol×K	1148.94	Joback Method
cpg	1382.54	J/mol×K	1188.99	Joback Method
cpg	1394.70	J/mol×K	1229.04	Joback Method
cpg	1405.76	J/mol×K	1269.09	Joback Method
cpg	1415.84	J/mol×K	1309.14	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360239&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