Glutaric acid, monoamide, N-tetradecyl-, decyl ester

Inchi: InChI=1S/C29H57NO3/c1-3-5-7-9-11-13-14-15-16-17-19-21-26-30-28(31)24-23-25-29(32

InchiKey: MKIXPEAMEZIGJA-UHFFFAOYSA-N

Formula: C29H57NO3

SMILES: CCCCCCCCCCCCCCNC(=O)CCCC(=O)OCCCCCCCCCC

Mol. weight [g/mol]: 467.77

Physical Properties

Property code	Value	Unit	Source
gf	-80.15	kJ/mol	Joback Method
hf	-945.80	kJ/mol	Joback Method
hfus	80.35	kJ/mol	Joback Method
hvap	102.49	kJ/mol	Joback Method
log10ws	-9.79		Crippen Method
logp	8.658		Crippen Method
mcvol	438.460	ml/mol	McGowan Method
pc	664.26	kPa	Joback Method
rinpol	3545.00		NIST Webbook
tb	1043.25	K	Joback Method
tc	1308.86	K	Joback Method
tf	591.34	K	Joback Method
vc	1.724	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1574.64	J/mol×K	1043.25	Joback Method
cpg	1598.65	J/mol×K	1087.52	Joback Method
cpg	1620.44	J/mol×K	1131.79	Joback Method
cpg	1640.13	J/mol×K	1176.06	Joback Method
cpg	1657.89	J/mol×K	1220.33	Joback Method
cpg	1673.84	J/mol×K	1264.59	Joback Method
cpg	1688.13	J/mol×K	1308.86	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=U360803&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