Glutaric acid, 2,6-dimethoxyphenyl pentadecyl ester

Inchi: InChI=1S/C28H46O6/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-23-33-26(29)21-18-22-27(30)
InchiKey: BKYWZLPOZAMGMF-UHFFFAOYSA-N
Formula: C28H46O6
SMILES: CCCCCCCCCCCCCCCCOC(=O)CCCC(=O)Oc1c(OC)cccc1OC
Mol. weight [g/mol]: 478.66

Physical Properties

Property code	Value	Unit	Source
gf	-399.81	kJ/mol	Joback Method
hf	-1161.70	kJ/mol	Joback Method
hfus	69.49	kJ/mol	Joback Method
hvap	104.65	kJ/mol	Joback Method
log10ws	-8.42		Crippen Method
logp	7.414		Crippen Method
mcvol	408.240	ml/mol	McGowan Method
pc	794.84	kPa	Joback Method
rinpol	3555.00		NIST Webbook
tb	1074.10	K	Joback Method
tc	1328.71	K	Joback Method
tf	645.56	K	Joback Method
vc	1.579	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1424.96	J/mol×K	1074.10	Joback Method
cpg	1440.66	J/mol×K	1116.53	Joback Method
cpg	1453.79	J/mol×K	1158.97	Joback Method
cpg	1464.38	J/mol×K	1201.40	Joback Method
cpg	1472.46	J/mol×K	1243.84	Joback Method
cpg	1478.06	J/mol×K	1286.27	Joback Method
cpg	1481.20	J/mol×K	1328.71	Joback Method
dvisc	0.0001002	Pa×s	645.56	Joback Method
dvisc	0.0000553	Pa×s	716.98	Joback Method

dvisc	0.0000339	Pa×s	788.41	Joback Method
dvisc	0.0000226	Pa×s	859.83	Joback Method
dvisc	0.0000160	Pa×s	931.25	Joback Method
dvisc	0.0000119	Pa×s	1002.68	Joback Method
dvisc	0.0000092	Pa×s	1074.10	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=U358717&Units=SI

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
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