Glutaric acid, dec-2-yl 4-acetylphenyl ester

Inchi: InChI=1S/C23H34O5/c1-4-5-6-7-8-9-11-18(2)27-22(25)12-10-13-23(26)28-21-16-14-20(1
InchiKey: XWBUAKSNOZBJDB-UHFFFAOYSA-N
Formula: C23H34O5
SMILES: CCCCCCCCC(C)OC(=O)CCCC(=O)Oc1ccc(C(C)=O)cc1
Mol. weight [g/mol]: 390.51

Physical Properties

Property code	Value	Unit	Source
gf	-353.64	kJ/mol	Joback Method
hf	-900.45	kJ/mol	Joback Method
hfus	52.63	kJ/mol	Joback Method
hvap	94.40	kJ/mol	Joback Method
log10ws	-6.86		Crippen Method
logp	5.647		Crippen Method
mcvol	327.620	ml/mol	McGowan Method
pc	1151.44	kPa	Joback Method
rinpol	2901.00		NIST Webbook
rinpol	2901.00		NIST Webbook
tb	963.31	K	Joback Method
tc	1180.32	K	Joback Method
tf	567.16	K	Joback Method
vc	1.264	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1073.90	J/mol×K	963.31	Joback Method
cpg	1088.75	J/mol×K	999.48	Joback Method
cpg	1102.18	J/mol×K	1035.65	Joback Method
cpg	1114.25	J/mol×K	1071.82	Joback Method
cpg	1124.97	J/mol×K	1107.99	Joback Method
cpg	1134.39	J/mol×K	1144.15	Joback Method
cpg	1142.54	J/mol×K	1180.32	Joback Method
dvisc	0.0003833	Pa×s	567.16	Joback Method

dvisc	0.0002022	Pa×s	633.19	Joback Method
dvisc	0.0001203	Pa×s	699.21	Joback Method
dvisc	0.0000783	Pa×s	765.24	Joback Method
dvisc	0.0000546	Pa×s	831.26	Joback Method
dvisc	0.0000401	Pa×s	897.28	Joback Method
dvisc	0.0000308	Pa×s	963.31	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=U392037&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