Glutaric acid, dec-2-yl 2,3-dimethylphenyl ester

Inchi: InChI=1S/C23H36O4/c1-5-6-7-8-9-10-14-19(3)26-22(24)16-12-17-23(25)27-21-15-11-13
InchiKey: UQXXGQGSTRDPMD-UHFFFAOYSA-N
Formula: C23H36O4
SMILES: CCCCCCCCC(C)OC(=O)CCCC(=O)Oc1cccc(C)c1C
Mol. weight [g/mol]: 376.53

Physical Properties

Property code	Value	Unit	Source
gf	-234.35	kJ/mol	Joback Method
hf	-799.34	kJ/mol	Joback Method
hfus	50.64	kJ/mol	Joback Method
hvap	88.32	kJ/mol	Joback Method
log10ws	-7.15		Crippen Method
logp	6.061		Crippen Method
mcvol	326.050	ml/mol	McGowan Method
pc	1092.82	kPa	Joback Method
rinpol	2683.00		NIST Webbook
rinpol	2683.00		NIST Webbook
tb	914.42	K	Joback Method
tc	1122.12	K	Joback Method
tf	529.75	K	Joback Method
vc	1.258	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1057.97	J/mol×K	914.42	Joback Method
cpg	1074.69	J/mol×K	949.04	Joback Method
cpg	1090.08	J/mol×K	983.65	Joback Method
cpg	1104.16	J/mol×K	1018.27	Joback Method
cpg	1116.97	J/mol×K	1052.89	Joback Method
cpg	1128.53	J/mol×K	1087.50	Joback Method
cpg	1138.88	J/mol×K	1122.12	Joback Method
dvisc	0.0004153	Pa×s	529.75	Joback Method

dvisc	0.0002172	Pa×s	593.86	Joback Method
dvisc	0.0001289	Pa×s	657.97	Joback Method
dvisc	0.0000839	Pa×s	722.09	Joback Method
dvisc	0.0000586	Pa×s	786.20	Joback Method
dvisc	0.0000432	Pa×s	850.31	Joback Method
dvisc	0.0000332	Pa×s	914.42	Joback Method

Sources

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=U392226&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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