Glutaric acid, 2,3-dichlorophenyl 4-biphenyl ester

Inchi: InChI=1S/C23H18Cl2O4/c24-19-8-4-9-20(23(19)25)29-22(27)11-5-10-21(26)28-18-14-12

InchiKey: TZVPTAKELRUGEK-UHFFFAOYSA-N

Formula: C23H18Cl2O4

SMILES: O=C(CCCC(=O)Oc1cccc(Cl)c1Cl)Oc1ccc(-c2ccccc2)cc1

Mol. weight [g/mol]: 429.29

Physical Properties

Property code	Value	Unit	Source
gf	-40.58	kJ/mol	Joback Method
hf	-363.95	kJ/mol	Joback Method
hfus	50.25	kJ/mol	Joback Method
hvap	102.69	kJ/mol	Joback Method
log10ws	-8.14		Crippen Method
logp	6.342		Crippen Method
mcvol	303.010	ml/mol	McGowan Method
pc	1652.46	kPa	Joback Method
rinpol	3533.00		NIST Webbook
rinpol	3533.00		NIST Webbook
tb	1048.06	K	Joback Method
tc	1302.77	K	Joback Method
tf	669.95	K	Joback Method
vc	1.145	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	884.60	J/mol×K	1048.06	Joback Method
cpg	893.42	J/mol×K	1090.51	Joback Method
cpg	900.81	J/mol×K	1132.96	Joback Method
cpg	906.86	J/mol×K	1175.42	Joback Method
cpg	911.61	J/mol×K	1217.87	Joback Method
cpg	915.16	J/mol×K	1260.32	Joback Method
cpg	917.56	J/mol×K	1302.77	Joback Method
dvisc	0.0001913	Pa×s	669.95	Joback Method

dvisc	0.0001220	Pa×s	732.97	Joback Method
dvisc	0.0000836	Pa×s	795.99	Joback Method
dvisc	0.0000605	Pa×s	859.00	Joback Method
dvisc	0.0000458	Pa×s	922.02	Joback Method
dvisc	0.0000359	Pa×s	985.04	Joback Method
dvisc	0.0000290	Pa×s	1048.06	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390130&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

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