Glutaric acid, 3-chlorophenyl 4-biphenyl ester

Inchi: InChI=1S/C23H19ClO4/c24-19-8-4-9-21(16-19)28-23(26)11-5-10-22(25)27-20-14-12-18(
InchiKey: DYLPJCHPKNZRCF-UHFFFAOYSA-N
Formula: C23H19ClO4
SMILES: O=C(CCCC(=O)Oc1cccc(Cl)c1)Oc1ccc(-c2ccccc2)cc1
Mol. weight [g/mol]: 394.85

Physical Properties

Property code	Value	Unit	Source
gf	-19.02	kJ/mol	Joback Method
hf	-336.74	kJ/mol	Joback Method
hfus	46.44	kJ/mol	Joback Method
hvap	97.64	kJ/mol	Joback Method
log10ws	-7.45		Crippen Method
logp	5.688		Crippen Method
mcvol	290.770	ml/mol	McGowan Method
pc	1724.59	kPa	Joback Method
rinpol	3311.00		NIST Webbook
rinpol	3311.00		NIST Webbook
tb	1005.65	K	Joback Method
tc	1256.24	K	Joback Method
tf	627.51	K	Joback Method
vc	1.097	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	869.10	J/mol×K	1005.65	Joback Method
cpg	879.56	J/mol×K	1047.41	Joback Method
cpg	888.59	J/mol×K	1089.18	Joback Method
cpg	896.25	J/mol×K	1130.94	Joback Method
cpg	902.62	J/mol×K	1172.71	Joback Method
cpg	907.78	J/mol×K	1214.47	Joback Method
cpg	911.80	J/mol×K	1256.24	Joback Method
dvisc	0.0002527	Pa×s	627.51	Joback Method

dvisc	0.0001545	Pa×s	690.53	Joback Method
dvisc	0.0001026	Pa×s	753.56	Joback Method
dvisc	0.0000726	Pa×s	816.58	Joback Method
dvisc	0.0000539	Pa×s	879.60	Joback Method
dvisc	0.0000417	Pa×s	942.63	Joback Method
dvisc	0.0000333	Pa×s	1005.65	Joback Method

Sources

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=U390128&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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