Glutaric acid, 3-chlorophenyl diphenylmethyl ester

Inchi: InChI=1S/C24H21ClO4/c25-20-13-7-14-21(17-20)28-22(26)15-8-16-23(27)29-24(18-9-3-

InchiKey: ZTMOEITYEWINNX-UHFFFAOYSA-N

Formula: C24H21ClO4

SMILES: O=C(CCCC(=O)OC(c1ccccc1)c1ccccc1)Oc1cccc(Cl)c1

Mol. weight [g/mol]: 408.87

Physical Properties

Property code	Value	Unit	Source
gf	-3.41	kJ/mol	Joback Method
hf	-351.19	kJ/mol	Joback Method
hfus	45.90	kJ/mol	Joback Method
hvap	98.82	kJ/mol	Joback Method
log10ws	-6.80		Crippen Method
logp	5.748		Crippen Method
mcvol	304.860	ml/mol	McGowan Method
pc	1624.60	kPa	Joback Method
rinpol	3154.00		NIST Webbook
rinpol	3154.00		NIST Webbook
tb	1023.11	K	Joback Method
tc	1274.04	K	Joback Method
tf	611.26	K	Joback Method
vc	1.147	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	929.28	J/mol×K	1023.11	Joback Method
cpg	939.93	J/mol×K	1064.93	Joback Method
cpg	949.15	J/mol×K	1106.75	Joback Method
cpg	957.01	J/mol×K	1148.57	Joback Method
cpg	963.61	J/mol×K	1190.39	Joback Method
cpg	969.05	J/mol×K	1232.21	Joback Method
cpg	973.41	J/mol×K	1274.04	Joback Method
dvisc	0.0002659	Pa×s	611.26	Joback Method

dvisc	0.0001476	Pa×s	679.90	Joback Method
dvisc	0.0000912	Pa×s	748.54	Joback Method
dvisc	0.0000612	Pa×s	817.18	Joback Method
dvisc	0.0000436	Pa×s	885.83	Joback Method
dvisc	0.0000327	Pa×s	954.47	Joback Method
dvisc	0.0000254	Pa×s	1023.11	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=U393348&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