Glutaric acid, 2,3-dichlorophenyl diphenylmethyl ester

Inchi: InChI=1S/C24H20Cl2O4/c25-19-13-7-14-20(23(19)26)29-21(27)15-8-16-22(28)30-24(17-

InchiKey: QDZYYVMHOWDZKS-UHFFFAOYSA-N

Formula: C24H20Cl2O4

SMILES: O=C(CCCC(=O)OC(c1ccccc1)c1ccccc1)Oc1cccc(Cl)c1Cl

Mol. weight [g/mol]: 443.32

Physical Properties

Property code	Value	Unit	Source
gf	-24.97	kJ/mol	Joback Method
hf	-378.40	kJ/mol	Joback Method
hfus	49.71	kJ/mol	Joback Method
hvap	103.86	kJ/mol	Joback Method
log10ws	-7.48		Crippen Method
logp	6.402		Crippen Method
mcvol	317.100	ml/mol	McGowan Method
pc	1558.58	kPa	Joback Method
rinpol	3356.00		NIST Webbook
rinpol	3356.00		NIST Webbook
tb	1065.52	K	Joback Method
tc	1320.89	K	Joback Method
tf	653.70	K	Joback Method
vc	1.196	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	944.83	J/mol×K	1065.52	Joback Method
cpg	953.84	J/mol×K	1108.08	Joback Method
cpg	961.44	J/mol×K	1150.64	Joback Method
cpg	967.71	J/mol×K	1193.21	Joback Method
cpg	972.74	J/mol×K	1235.77	Joback Method
cpg	976.62	J/mol×K	1278.33	Joback Method
cpg	979.43	J/mol×K	1320.89	Joback Method
dvisc	0.0001942	Pa×s	653.70	Joback Method

dvisc	0.0001137	Pa×s	722.34	Joback Method
dvisc	0.0000730	Pa×s	790.97	Joback Method
dvisc	0.0000503	Pa×s	859.61	Joback Method
dvisc	0.0000367	Pa×s	928.25	Joback Method
dvisc	0.0000279	Pa×s	996.88	Joback Method
dvisc	0.0000220	Pa×s	1065.52	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=U393350&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