Glutaric acid, 2,2-dichloroethyl 4-biphenyl ester

Inchi: InChI=1S/C19H18Cl2O4/c20-17(21)13-24-18(22)7-4-8-19(23)25-16-11-9-15(10-12-16)14

InchiKey: KATGLQNMLIDCLG-UHFFFAOYSA-N

Formula: C19H18Cl2O4

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

Mol. weight [g/mol]: 381.25

Physical Properties

Property code	Value	Unit	Source
gf	-169.85	kJ/mol	Joback Method
hf	-500.26	kJ/mol	Joback Method
hfus	43.10	kJ/mol	Joback Method
hvap	89.80	kJ/mol	Joback Method
log10ws	-6.26		Crippen Method
logp	4.776		Crippen Method
mcvol	270.410	ml/mol	McGowan Method
pc	1781.84	kPa	Joback Method
rinpol	2931.00		NIST Webbook
rinpol	2931.00		NIST Webbook
tb	919.46	K	Joback Method
tc	1154.67	K	Joback Method
tf	558.41	K	Joback Method
vc	1.024	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	769.48	J/mol×K	919.46	Joback Method
cpg	814.38	J/mol×K	1115.46	Joback Method
cpg	807.75	J/mol×K	1076.26	Joback Method
cpg	800.00	J/mol×K	1037.06	Joback Method
cpg	791.07	J/mol×K	997.86	Joback Method
cpg	780.91	J/mol×K	958.66	Joback Method
cpg	819.92	J/mol×K	1154.67	Joback Method
dvisc	0.0000439	Pa×s	919.46	Joback Method

dvisc	0.0000561	Pa×s	859.29	Joback Method
dvisc	0.0000745	Pa×s	799.11	Joback Method
dvisc	0.0001035	Pa×s	738.94	Joback Method
dvisc	0.0001526	Pa×s	678.76	Joback Method
dvisc	0.0002425	Pa×s	618.59	Joback Method
dvisc	0.0004258	Pa×s	558.41	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390123&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