Glutaric acid, 2,4-dichloronaphthyl isobutyl ester

Inchi: InChI=1S/C19H20Cl2O4/c1-12(2)11-24-17(22)8-5-9-18(23)25-19-14-7-4-3-6-13(14)15(20
InchiKey: UOTBHJDCJKDTFK-UHFFFAOYSA-N
Formula: C19H20Cl2O4
SMILES: CC(C)COC(=O)CCCC(=O)Oc1c(Cl)cc(Cl)c2ccccc12
Mol. weight [g/mol]: 383.27

Physical Properties

Property code	Value	Unit	Source
gf	-194.87	kJ/mol	Joback Method
hf	-568.66	kJ/mol	Joback Method
hfus	45.30	kJ/mol	Joback Method
hvap	90.48	kJ/mol	Joback Method
log10ws	-6.51		Crippen Method
logp	5.422		Crippen Method
mcvol	274.710	ml/mol	McGowan Method
pc	1619.37	kPa	Joback Method
rinpol	2845.00		NIST Webbook
rinpol	2845.00		NIST Webbook
tb	921.72	K	Joback Method
tc	1148.42	K	Joback Method
tf	589.73	K	Joback Method
vc	1.054	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	789.71	J/mol×K	921.72	Joback Method
cpg	839.25	J/mol×K	1110.64	Joback Method
cpg	831.27	J/mol×K	1072.85	Joback Method
cpg	822.37	J/mol×K	1035.07	Joback Method
cpg	812.50	J/mol×K	997.29	Joback Method
cpg	801.63	J/mol×K	959.50	Joback Method
cpg	846.37	J/mol×K	1148.42	Joback Method
dvisc	0.0000902	Pa×s	921.72	Joback Method

dvisc	0.0001094	Pa×s	866.39	Joback Method
dvisc	0.0001364	Pa×s	811.06	Joback Method
dvisc	0.0001756	Pa×s	755.73	Joback Method
dvisc	0.0002353	Pa×s	700.39	Joback Method
dvisc	0.0003315	Pa×s	645.06	Joback Method
dvisc	0.0004981	Pa×s	589.73	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U358922&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