Glutaric acid, 2,4-dichloronaphthyl octyl ester

Inchi: InChI=1S/C23H28Cl2O4/c1-2-3-4-5-6-9-15-28-21(26)13-10-14-22(27)29-23-18-12-8-7-11
InchiKey: LIVUMWCFPYYRLG-UHFFFAOYSA-N
Formula: C23H28Cl2O4
SMILES: CCCCCCCCOC(=O)CCCC(=O)Oc1c(Cl)cc(Cl)c2ccccc12
Mol. weight [g/mol]: 439.37

Physical Properties

Property code	Value	Unit	Source
gf	-158.75	kJ/mol	Joback Method
hf	-645.94	kJ/mol	Joback Method
hfus	59.19	kJ/mol	Joback Method
hvap	99.78	kJ/mol	Joback Method
log10ws	-8.43		Crippen Method
logp	7.126		Crippen Method
mcvol	331.070	ml/mol	McGowan Method
pc	1208.15	kPa	Joback Method
rinpol	3333.00		NIST Webbook
rinpol	3333.00		NIST Webbook
tb	1013.68	K	Joback Method
tc	1243.03	K	Joback Method
tf	649.81	K	Joback Method
vc	1.284	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1023.94	J/mol×K	1013.68	Joback Method
cpg	1036.74	J/mol×K	1051.91	Joback Method
cpg	1048.40	J/mol×K	1090.13	Joback Method
cpg	1058.97	J/mol×K	1128.36	Joback Method
cpg	1068.51	J/mol×K	1166.58	Joback Method
cpg	1077.10	J/mol×K	1204.81	Joback Method
cpg	1084.78	J/mol×K	1243.03	Joback Method
dvisc	0.0003199	Pa×s	649.81	Joback Method

dvisc	0.0002119	Pa×s	710.46	Joback Method
dvisc	0.0001497	Pa×s	771.10	Joback Method
dvisc	0.0001113	Pa×s	831.75	Joback Method
dvisc	0.0000861	Pa×s	892.39	Joback Method
dvisc	0.0000688	Pa×s	953.04	Joback Method
dvisc	0.0000565	Pa×s	1013.68	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U358928&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