Diethylmalonic acid, 2,4-dichloronaphth-1-yl ethyl ester

Inchi: InChI=1S/C19H20Cl2O4/c1-4-19(5-2,17(22)24-6-3)18(23)25-16-13-10-8-7-9-12(13)14(20
InchiKey: DUVDIWWDPPISEX-UHFFFAOYSA-N
Formula: C19H20Cl2O4
SMILES: CCOC(=O)C(CC)(CC)C(=O)Oc1c(Cl)cc(Cl)c2ccccc12
Mol. weight [g/mol]: 383.27

Physical Properties

Property code	Value	Unit	Source
gf	-189.59	kJ/mol	Joback Method
hf	-572.13	kJ/mol	Joback Method
hfus	41.41	kJ/mol	Joback Method
hvap	89.58	kJ/mol	Joback Method
log10ws	-6.51		Crippen Method
logp	5.422		Crippen Method
mcvol	274.710	ml/mol	McGowan Method
pc	1633.81	kPa	Joback Method
rinpol	2619.00		NIST Webbook
rinpol	2619.00		NIST Webbook
tb	918.93	K	Joback Method
tc	1150.20	K	Joback Method
tf	607.15	K	Joback Method
vc	1.048	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	790.00	J/mol×K	918.93	Joback Method
cpg	802.03	J/mol×K	957.48	Joback Method
cpg	813.08	J/mol×K	996.02	Joback Method
cpg	823.23	J/mol×K	1034.57	Joback Method
cpg	832.54	J/mol×K	1073.11	Joback Method
cpg	841.08	J/mol×K	1111.66	Joback Method
cpg	848.94	J/mol×K	1150.20	Joback Method
dvisc	0.0004069	Pa×s	607.15	Joback Method

dvisc	0.0002756	Pa×s	659.11	Joback Method
dvisc	0.0001976	Pa×s	711.08	Joback Method
dvisc	0.0001482	Pa×s	763.04	Joback Method
dvisc	0.0001153	Pa×s	815.00	Joback Method
dvisc	0.0000925	Pa×s	866.97	Joback Method
dvisc	0.0000760	Pa×s	918.93	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=U370048&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