Phthalic acid, 2,2-dichloroethyl nonyl ester

Inchi: InChI=1S/C19H26Cl2O4/c1-2-3-4-5-6-7-10-13-24-18(22)15-11-8-9-12-16(15)19(23)25-14
InchiKey: UGNGSARBXWZPHB-UHFFFAOYSA-N
Formula: C19H26Cl2O4
SMILES: CCCCCCCCCOC(=O)c1ccccc1C(=O)OCC(Cl)Cl
Mol. weight [g/mol]: 389.31

Physical Properties

Property code	Value	Unit	Source
gf	-282.26	kJ/mol	Joback Method
hf	-736.79	kJ/mol	Joback Method
hfus	49.06	kJ/mol	Joback Method
hvap	87.52	kJ/mol	Joback Method
log10ws	-6.64		Crippen Method
logp	5.554		Crippen Method
mcvol	294.170	ml/mol	McGowan Method
pc	1371.74	kPa	Joback Method
rinpol	2617.00		NIST Webbook
rinpol	2617.00		NIST Webbook
tb	892.78	K	Joback Method
tc	1103.94	K	Joback Method
tf	531.99	K	Joback Method
vc	1.131	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	872.04	J/mol×K	892.78	Joback Method
cpg	885.71	J/mol×K	927.97	Joback Method
cpg	898.22	J/mol×K	963.17	Joback Method
cpg	909.60	J/mol×K	998.36	Joback Method
cpg	919.89	J/mol×K	1033.55	Joback Method
cpg	929.11	J/mol×K	1068.74	Joback Method
cpg	937.29	J/mol×K	1103.94	Joback Method
dvisc	0.0004847	Pa×s	531.99	Joback Method

dvisc	0.0002632	Pa×s	592.12	Joback Method
dvisc	0.0001600	Pa×s	652.25	Joback Method
dvisc	0.0001057	Pa×s	712.38	Joback Method
dvisc	0.0000746	Pa×s	772.52	Joback Method
dvisc	0.0000553	Pa×s	832.65	Joback Method
dvisc	0.0000427	Pa×s	892.78	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U356930&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