Phthalic acid, 2,2-dichloroethyll octyl ester

Inchi: InChI=1S/C18H24Cl2O4/c1-2-3-4-5-6-9-12-23-17(21)14-10-7-8-11-15(14)18(22)24-13-16
InchiKey: DAXLVRXUCFHTRT-UHFFFAOYSA-N
Formula: C18H24Cl2O4
SMILES: CCCCCCCCOC(=O)c1ccccc1C(=O)OCC(Cl)Cl
Mol. weight [g/mol]: 375.29

Physical Properties

Property code	Value	Unit	Source
gf	-290.68	kJ/mol	Joback Method
hf	-716.15	kJ/mol	Joback Method
hfus	46.47	kJ/mol	Joback Method
hvap	85.29	kJ/mol	Joback Method
log10ws	-6.22		Crippen Method
logp	5.164		Crippen Method
mcvol	280.080	ml/mol	McGowan Method
pc	1474.75	kPa	Joback Method
rinpol	2516.00		NIST Webbook
rinpol	2516.00		NIST Webbook
tb	869.90	K	Joback Method
tc	1080.66	K	Joback Method
tf	520.72	K	Joback Method
vc	1.075	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	814.13	J/mol×K	869.90	Joback Method
cpg	870.60	J/mol×K	1045.54	Joback Method
cpg	861.43	J/mol×K	1010.41	Joback Method
cpg	851.23	J/mol×K	975.28	Joback Method
cpg	839.96	J/mol×K	940.15	Joback Method
cpg	827.60	J/mol×K	905.03	Joback Method
cpg	878.75	J/mol×K	1080.66	Joback Method
dvisc	0.0000495	Pa×s	869.90	Joback Method

dvisc	0.0000639	Pa×s	811.70	Joback Method
dvisc	0.0000859	Pa×s	753.51	Joback Method
dvisc	0.0001213	Pa×s	695.31	Joback Method
dvisc	0.0001824	Pa×s	637.11	Joback Method
dvisc	0.0002976	Pa×s	578.92	Joback Method
dvisc	0.0005419	Pa×s	520.72	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=U356929&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