Phthalic acid, 2-(4-chlorophenyl)ethyl decyl ester

Inchi: InChI=1S/C26H33ClO4/c1-2-3-4-5-6-7-8-11-19-30-25(28)23-12-9-10-13-24(23)26(29)31-

InchiKey: FDNBLNPCIKNKLX-UHFFFAOYSA-N

Formula: C26H33ClO4

SMILES: CCCCCCCCCCOC(=O)c1ccccc1C(=O)OCCc1ccc(Cl)cc1

Mol. weight [g/mol]: 444.99

Physical Properties

Property code	Value	Unit	Source
gf	-106.17	kJ/mol	Joback Method
hf	-635.19	kJ/mol	Joback Method
hfus	60.17	kJ/mol	Joback Method
hvap	102.04	kJ/mol	Joback Method
log10ws	-8.44		Crippen Method
logp	7.037		Crippen Method
mcvol	356.800	ml/mol	McGowan Method
pc	1091.38	kPa	Joback Method
rinpol	3303.00		NIST Webbook
rinpol	3303.00		NIST Webbook
tb	1047.61	K	Joback Method
tc	1283.06	K	Joback Method
tf	634.90	K	Joback Method
vc	1.373	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1158.89	J/mol×K	1047.61	Joback Method
cpg	1172.00	J/mol×K	1086.85	Joback Method
cpg	1183.59	J/mol×K	1126.09	Joback Method
cpg	1193.74	J/mol×K	1165.33	Joback Method
cpg	1202.51	J/mol×K	1204.57	Joback Method
cpg	1209.96	J/mol×K	1243.81	Joback Method
cpg	1216.16	J/mol×K	1283.06	Joback Method
dvisc	0.0001941	Pa×s	634.90	Joback Method

dvisc	0.0001110	Pa×s	703.68	Joback Method
dvisc	0.0000701	Pa×s	772.47	Joback Method
dvisc	0.0000477	Pa×s	841.25	Joback Method
dvisc	0.0000344	Pa×s	910.04	Joback Method
dvisc	0.0000260	Pa×s	978.82	Joback Method
dvisc	0.0000204	Pa×s	1047.61	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U377844&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