Phthalic acid, decyl 2,4-dichlorobenzyl ester

Inchi: InChI=1S/C25H30Cl2O4/c1-2-3-4-5-6-7-8-11-16-30-24(28)21-12-9-10-13-22(21)25(29)31
InchiKey: UZNRCIPCUQALLQ-UHFFFAOYSA-N
Formula: C25H30Cl2O4
SMILES: CCCCCCCCCCOC(=O)c1ccccc1C(=O)OCc1ccc(Cl)cc1Cl
Mol. weight [g/mol]: 465.41

Physical Properties

Property code	Value	Unit	Source
gf	-136.15	kJ/mol	Joback Method
hf	-641.76	kJ/mol	Joback Method
hfus	61.39	kJ/mol	Joback Method
hvap	104.86	kJ/mol	Joback Method
log10ws	-9.20		Crippen Method
logp	7.648		Crippen Method
mcvol	354.950	ml/mol	McGowan Method
pc	1123.81	kPa	Joback Method
rinpol	3194.00		NIST Webbook
rinpol	3194.00		NIST Webbook
tb	1067.14	K	Joback Method
tc	1307.11	K	Joback Method
tf	666.07	K	Joback Method
vc	1.365	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1117.37	J/mol×K	1067.14	Joback Method
cpg	1160.41	J/mol×K	1267.12	Joback Method
cpg	1154.58	J/mol×K	1227.12	Joback Method
cpg	1147.42	J/mol×K	1187.13	Joback Method
cpg	1138.87	J/mol×K	1147.13	Joback Method
cpg	1128.87	J/mol×K	1107.14	Joback Method
cpg	1164.96	J/mol×K	1307.11	Joback Method
dvisc	0.0000205	Pa×s	1067.14	Joback Method

dvisc	0.0000258	Pa×s	1000.30	Joback Method
dvisc	0.0000335	Pa×s	933.45	Joback Method
dvisc	0.0000453	Pa×s	866.61	Joback Method
dvisc	0.0000644	Pa×s	799.76	Joback Method
dvisc	0.0000978	Pa×s	732.92	Joback Method
dvisc	0.0001613	Pa×s	666.07	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=U382566&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