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

Inchi: InChI=1S/C24H20Cl2O4/c25-19-9-5-17(6-10-19)13-15-29-23(27)21-3-1-2-4-22(21)24(28
InchiKey: VWFWCCJOWBZDHR-UHFFFAOYSA-N
Formula: C24H20Cl2O4
SMILES: O=C(OCCc1ccc(Cl)cc1)c1ccccc1C(=O)OCCc1ccc(Cl)cc1
Mol. weight [g/mol]: 443.32

Physical Properties

Property code	Value	Unit	Source
gf	-32.16	kJ/mol	Joback Method
hf	-384.59	kJ/mol	Joback Method
hfus	52.84	kJ/mol	Joback Method
hvap	104.91	kJ/mol	Joback Method
log10ws	-7.39		Crippen Method
logp	5.792		Crippen Method
mcvol	317.100	ml/mol	McGowan Method
pc	1530.66	kPa	Joback Method
rinpol	3470.00		NIST Webbook
rinpol	3470.00		NIST Webbook
tb	1070.94	K	Joback Method
tc	1324.89	K	Joback Method
tf	681.22	K	Joback Method
vc	1.202	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	942.59	J/mol×K	1070.94	Joback Method
cpg	973.11	J/mol×K	1282.56	Joback Method
cpg	969.57	J/mol×K	1240.24	Joback Method
cpg	964.82	J/mol×K	1197.91	Joback Method
cpg	958.79	J/mol×K	1155.59	Joback Method
cpg	951.40	J/mol×K	1113.26	Joback Method
cpg	975.53	J/mol×K	1324.89	Joback Method
dvisc	0.0000250	Pa×s	1070.94	Joback Method

dvisc	0.0000310	Pa×s	1005.99	Joback Method
dvisc	0.0000397	Pa×s	941.03	Joback Method
dvisc	0.0000527	Pa×s	876.08	Joback Method
dvisc	0.0000732	Pa×s	811.13	Joback Method
dvisc	0.0001077	Pa×s	746.17	Joback Method
dvisc	0.0001705	Pa×s	681.22	Joback Method

Sources

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=U377850&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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