

Isophthalic acid, monochloride, 2-methylcyclohexyl ester

Inchi:	InChI=1S/C15H17ClO3/c1-10-5-2-3-8-13(10)19-15(18)12-7-4-6-11(9-12)14(16)17/h4,6-7
InchiKey:	QMIRDWFKWIOXMX-UHFFFAOYSA-N
Formula:	C15H17ClO3
SMILES:	CC1CCCCC1OC(=O)c1cccc(C(=O)Cl)c1
Mol. weight [g/mol]:	280.75

Physical Properties

Property code	Value	Unit	Source
gf	-179.83	kJ/mol	Joback Method
hf	-467.01	kJ/mol	Joback Method
hfus	29.75	kJ/mol	Joback Method
hvap	72.33	kJ/mol	Joback Method
log10ws	-4.88		Crippen Method
logp	3.801		Crippen Method
mcvol	208.840	ml/mol	McGowan Method
pc	2271.90	kPa	Joback Method
rinpol	2120.00		NIST Webbook
rinpol	2120.00		NIST Webbook
tb	756.73	K	Joback Method
tc	996.30	K	Joback Method
tf	452.90	K	Joback Method
vc	0.778	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	589.41	J/molxK	756.73	Joback Method
cpg	605.87	J/molxK	796.66	Joback Method
cpg	620.91	J/molxK	836.59	Joback Method
cpg	634.54	J/molxK	876.51	Joback Method
cpg	646.80	J/molxK	916.44	Joback Method
cpg	657.72	J/molxK	956.37	Joback Method
cpg	667.34	J/molxK	996.30	Joback Method
dvisc	0.0013196	Paxs	452.90	Joback Method

dvisc	0.0007801	Paxs	503.54	Joback Method
dvisc	0.0005077	Paxs	554.18	Joback Method
dvisc	0.0003550	Paxs	604.82	Joback Method
dvisc	0.0002624	Paxs	655.45	Joback Method
dvisc	0.0002025	Paxs	706.09	Joback Method
dvisc	0.0001618	Paxs	756.73	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U345758&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
rin_{pol}:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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