

3,4-Dichlorobenzoic acid, 4-isopropyl phenyl ester

Inchi:	InChI=1S/C16H14Cl2O2/c1-10(2)11-3-6-13(7-4-11)20-16(19)12-5-8-14(17)15(18)9-12/h3
InchiKey:	KUYPPVGCZIGLAH-UHFFFAOYSA-N
Formula:	C16H14Cl2O2
SMILES:	CC(C)c1ccc(OC(=O)c2ccc(Cl)c(Cl)c2)cc1
Mol. weight [g/mol]:	309.19
CAS:	116465-99-7

Physical Properties

Property code	Value	Unit	Source
gf	19.55	kJ/mol	Joback Method
hf	-216.48	kJ/mol	Joback Method
hfus	31.77	kJ/mol	Joback Method
hvap	75.29	kJ/mol	Joback Method
log10ws	-6.11		Crippen Method
logp	5.336		Crippen Method
mcvol	220.700	ml/mol	McGowan Method
pc	2149.31	kPa	Joback Method
tb	784.49	K	Joback Method
tc	1028.94	K	Joback Method
tf	477.48	K	Joback Method
vc	0.832	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	565.55	J/molxK	784.49	Joback Method
cpg	578.85	J/molxK	825.23	Joback Method
cpg	590.99	J/molxK	865.97	Joback Method
cpg	602.00	J/molxK	906.72	Joback Method
cpg	611.93	J/molxK	947.46	Joback Method
cpg	620.82	J/molxK	988.20	Joback Method
cpg	628.72	J/molxK	1028.94	Joback Method
dvisc	0.0007133	Paxs	477.48	Joback Method
dvisc	0.0004316	Paxs	528.65	Joback Method

dvisc	0.0002853	Paxs	579.82	Joback Method
dvisc	0.0002017	Paxs	630.99	Joback Method
dvisc	0.0001502	Paxs	682.15	Joback Method
dvisc	0.0001166	Paxs	733.32	Joback Method
dvisc	0.0000935	Paxs	784.49	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=C116465997&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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/19-835-4/3-4-Dichlorobenzoic-acid-4-isopropyl-phenyl-ester.pdf>

Generated by Cheméo on 2024-04-20 04:12:37.316286115 +0000 UTC m=+15875606.236863430.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.