

Adipic acid, isobutyl 2,3,5,6-tetrachlorophenyl ester

Inchi:	InChI=1S/C16H18Cl4O4/c1-9(2)8-23-12(21)5-3-4-6-13(22)24-16-14(19)10(17)7-11(18)1
InchiKey:	IBKJTWOUNXFHHO-UHFFFAOYSA-N
Formula:	C16H18Cl4O4
SMILES:	CC(C)COC(=O)CCCC(=O)Oc1c(Cl)c(Cl)cc(Cl)c1Cl
Mol. weight [g/mol]:	416.12

Physical Properties

Property code	Value	Unit	Source
gf	-360.27	kJ/mol	Joback Method
hf	-740.76	kJ/mol	Joback Method
hfus	48.52	kJ/mol	Joback Method
hvap	91.60	kJ/mol	Joback Method
log10ws	-6.50		Crippen Method
logp	5.965		Crippen Method
mcvol	276.380	ml/mol	McGowan Method
pc	1561.05	kPa	Joback Method
rinsol	2644.00		NIST Webbook
tb	913.94	K	Joback Method
tc	1136.40	K	Joback Method
tf	595.58	K	Joback Method
vc	1.062	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	740.33	J/molxK	913.94	Joback Method
cpg	781.34	J/molxK	1099.33	Joback Method
cpg	775.31	J/molxK	1062.25	Joback Method
cpg	768.20	J/molxK	1025.17	Joback Method
cpg	760.00	J/molxK	988.09	Joback Method
cpg	750.72	J/molxK	951.02	Joback Method
cpg	786.29	J/molxK	1136.40	Joback Method
dvisc	0.0000507	Paxs	913.94	Joback Method
dvisc	0.0000625	Paxs	860.88	Joback Method

dvisc	0.0000792	Paxs	807.82	Joback Method
dvisc	0.0001038	Paxs	754.76	Joback Method
dvisc	0.0001417	Paxs	701.70	Joback Method
dvisc	0.0002035	Paxs	648.64	Joback Method
dvisc	0.0003117	Paxs	595.58	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=U353947&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

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