

Fumaric acid, 2-methylphenyl 2,3-dichlorophenyl ester

Inchi:	InChI=1S/C17H12Cl2O4/c1-11-5-2-3-7-13(11)22-15(20)9-10-16(21)23-14-8-4-6-12(18)1
InchiKey:	LRIFYFUTAMVXTD-MDZDMXLPSA-N
Formula:	C17H12Cl2O4
SMILES:	<chem>Cc1ccccc1OC(=O)C=CC(=O)Oc1cccc(Cl)c1Cl</chem>
Mol. weight [g/mol]:	351.18

Physical Properties

Property code	Value	Unit	Source
gf	-123.29	kJ/mol	Joback Method
hf	-359.42	kJ/mol	Joback Method
hfus	40.87	kJ/mol	Joback Method
hvap	87.01	kJ/mol	Joback Method
log10ws	-5.45		Crippen Method
logp	4.369		Crippen Method
mvol	237.930	ml/mol	McGowan Method
pc	2137.41	kPa	Joback Method
rinpol	2590.00		NIST Webbook
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tb	888.26	K	Joback Method
tc	1134.03	K	Joback Method
tf	570.83	K	Joback Method
vc	0.897	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	625.47	J/molxK	888.26	Joback Method
cpg	666.65	J/molxK	1093.06	Joback Method
cpg	660.48	J/molxK	1052.10	Joback Method
cpg	653.32	J/molxK	1011.14	Joback Method
cpg	645.13	J/molxK	970.18	Joback Method
cpg	635.86	J/molxK	929.22	Joback Method
cpg	671.86	J/molxK	1134.03	Joback Method
dvisc	0.0000580	Paxs	888.26	Joback Method

dvisc	0.0000712	Paxs	835.36	Joback Method
dvisc	0.0000898	Paxs	782.45	Joback Method
dvisc	0.0001173	Paxs	729.55	Joback Method
dvisc	0.0001598	Paxs	676.64	Joback Method
dvisc	0.0002292	Paxs	623.74	Joback Method
dvisc	0.0003516	Paxs	570.83	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405687&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	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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