

Fumaric acid, 4-chlorobenzyl 2,4,6-trichlorophenyl ester

Inchi: InChI=1S/C17H10Cl4O4/c18-11-3-1-10(2-4-11)9-24-15(22)5-6-16(23)25-17-13(20)7-12(21)14-8
InchiKey: DFLILAMCVZWJHV-AATRIKPKSA-N
Formula: C17H10Cl4O4
SMILES: O=C(C=CC(=O)Oc1c(Cl)cc(Cl)cc1Cl)OCc1ccc(Cl)cc1
Mol. weight [g/mol]: 420.07

Physical Properties

Property code	Value	Unit	Source
gf	-156.78	kJ/mol	Joback Method
hf	-402.37	kJ/mol	Joback Method
hfus	48.88	kJ/mol	Joback Method
hvap	96.45	kJ/mol	Joback Method
log10ws	-6.61		Crippen Method
logp	5.505		Crippen Method
mvol	262.410	ml/mol	McGowan Method
pc	1971.80	kPa	Joback Method
rinpol	2922.00		NIST Webbook
rinpol	2922.00		NIST Webbook
tb	968.10	K	Joback Method
tc	1219.35	K	Joback Method
tf	643.19	K	Joback Method
vc	0.996	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	658.64	J/molxK	968.10	Joback Method
cpg	666.47	J/molxK	1009.98	Joback Method
cpg	673.22	J/molxK	1051.85	Joback Method
cpg	678.96	J/molxK	1093.73	Joback Method
cpg	683.71	J/molxK	1135.60	Joback Method
cpg	687.54	J/molxK	1177.48	Joback Method
cpg	690.47	J/molxK	1219.35	Joback Method
dvisc	0.0002289	Paxs	643.19	Joback Method

dvisc	0.0001561	Paxs	697.34	Joback Method
dvisc	0.0001125	Paxs	751.49	Joback Method
dvisc	0.0000847	Paxs	805.64	Joback Method
dvisc	0.0000661	Paxs	859.80	Joback Method
dvisc	0.0000531	Paxs	913.95	Joback Method
dvisc	0.0000437	Paxs	968.10	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405925&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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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