Phenol, 2,4-dichloro-, benzenesulfonate

Other names:	EM 923
	Genite
	Genite EM-923
	Genite 923
	Genitol 923
	2,4-Dichlorophenyl benzenesulfonate
	2,4-Dichlorophenyl benzenesulphonate
	923
	Benzenesulfonic acid, 2,4-dichlorophenyl ester
	Compound 923
	DPBS
	Genite-R99
	Genitol
	2,4-Dichlorophenyl ester of benzenesulfonic acid
	Benzenesulphonic acid, 2,4-dichlorophenyl ester
	2,4-Dichlorfenylester kyseliny benzensulfonove
	2,4-Dichlorophenol, benzenesulfonate
	Latka 923
	Genite (insecticide)
	NSC 27323
Inchi:	InChI=1S/C12H8Cl2O3S/c13-9-6-7-12(11(14)8-9)17-18(15,16)10-4-2-1-3-5-10/h1-8H
InchiKey:	OZFAFGSSMRRTDW-UHFFFAOYSA-N
Formula:	C12H8Cl2O3S
SMILES:	O=S(=O)(Oc1ccc(Cl)cc1Cl)c1ccccc1
Mol. weight [g/mol]:	303.16
CAS:	97-16-5

Physical Properties

Property code	Value	Unit	Source
gf	-341.68	kJ/mol	Joback Method
hf	-457.94	kJ/mol	Joback Method
hfus	35.10	kJ/mol	Joback Method
hvap	78.00	kJ/mol	Joback Method
log10ws	-4.46		Crippen Method
logp	3.761		Crippen Method
mcvol	190.860	ml/mol	McGowan Method
pc	3568.53	kPa	Joback Method

rinpol	2043.00		NIST Webbook
ripol	3231.00		NIST Webbook
tb	682.34	K	Joback Method
tc	925.06	K	Joback Method
tf	423.51	K	Joback Method
vc	0.734	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	432.12	J/mol×K	682.34	Joback Method
cpg	444.55	J/mol×K	722.79	Joback Method
cpg	455.83	J/mol×K	763.25	Joback Method
cpg	465.98	J/mol×K	803.70	Joback Method
cpg	475.01	J/mol×K	844.15	Joback Method
cpg	482.93	J/mol×K	884.60	Joback Method
cpg	489.76	J/mol×K	925.06	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C97165&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method

Legend

cpg: Ideal gas heat capacity
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume