

Benzenemethanol, 2-chloro-«alpha»-(4-chlorophenyl)-«alpha»-(trichloromethyl)-

Other names:	Benzenemethanol, 4-chloro-«alpha»-(2-chlorophenyl)-«alpha»-(trichloromethyl)- o,p-Dicofol Ethanol, 1-(2-chlorophenyl)-1-(4-chlorophenyl)-2,2,2-trichloro- 2-Chloro-«alpha»-(4-chlorophenyl)-«alpha»-(trichloromethyl)benzenemethanol
Inchi:	InChI=1S/C14H9Cl5O/c15-10-7-5-9(6-8-10)13(20,14(17,18)19)11-3-1-2-4-12(11)16/h1-8
InchiKey:	LUXSISXJGNCOKN-UHFFFAOYSA-N
Formula:	C14H9Cl5O
SMILES:	OC(c1ccc(Cl)cc1)(c1cccc1Cl)C(Cl)(Cl)Cl
Mol. weight [g/mol]:	370.49
CAS:	10606-46-9

Physical Properties

Property code	Value	Unit	Source
gf	81.77	kJ/mol	Joback Method
hf	-130.60	kJ/mol	Joback Method
hfus	29.57	kJ/mol	Joback Method
hvap	88.65	kJ/mol	Joback Method
log10ws	-6.35		Crippen Method
logp	5.599		Crippen Method
mcvol	227.670	ml/mol	McGowan Method
pc	2537.93	kPa	Joback Method
tb	855.91	K	Joback Method
tc	1113.69	K	Joback Method
tf	397.07 ± 0.20	K	NIST Webbook
vc	0.846	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	536.02	J/molxK	855.91	Joback Method
cpg	544.31	J/molxK	898.87	Joback Method
cpg	551.91	J/molxK	941.84	Joback Method
cpg	559.01	J/molxK	984.80	Joback Method
cpg	565.76	J/molxK	1027.76	Joback Method

cpg	572.34	J/mol×K	1070.72	Joback Method
cpg	578.92	J/mol×K	1113.69	Joback Method
dvisc	0.0002838	Paxs	540.68	Joback Method
dvisc	0.0001325	Paxs	593.22	Joback Method
dvisc	0.0000700	Paxs	645.76	Joback Method
dvisc	0.0000407	Paxs	698.30	Joback Method
dvisc	0.0000256	Paxs	750.83	Joback Method
dvisc	0.0000170	Paxs	803.37	Joback Method
dvisc	0.0000119	Paxs	855.91	Joback Method
hfust	25.20	kJ/mol	396.30	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C10606469&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
hfust:	Enthalpy of fusion at a given temperature
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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