

Benzoic acid, 4-chloro, 2,2-dichloroethyl ester

Inchi:	InChI=1S/C9H7Cl3O2/c10-7-3-1-6(2-4-7)9(13)14-5-8(11)12/h1-4,8H,5H2
InchiKey:	UWGKJXMGYWWQCD-UHFFFAOYSA-N
Formula:	C9H7Cl3O2
SMILES:	O=C(OCC(Cl)Cl)c1ccc(Cl)cc1
Mol. weight [g/mol]:	253.51

Physical Properties

Property code	Value	Unit	Source
gf	-144.47	kJ/mol	Joback Method
hf	-301.33	kJ/mol	Joback Method
hfus	24.57	kJ/mol	Joback Method
hvap	60.49	kJ/mol	Joback Method
log10ws	-3.73		Crippen Method
logp	3.300		Crippen Method
mcvol	158.070	ml/mol	McGowan Method
pc	3009.03	kPa	Joback Method
rinpol	1622.00		NIST Webbook
rinpol	1622.00		NIST Webbook
rinpol	1635.00		NIST Webbook
rinpol	1647.00		NIST Webbook
rinpol	1647.00		NIST Webbook
rinpol	1625.00		NIST Webbook
rinpol	1633.00		NIST Webbook
tb	625.12	K	Joback Method
tc	859.74	K	Joback Method
tf	377.05	K	Joback Method
vc	0.597	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	326.67	J/mol×K	625.12	Joback Method
cpg	336.80	J/mol×K	664.22	Joback Method
cpg	346.18	J/mol×K	703.33	Joback Method

cpg	354.82	J/molxK	742.43	Joback Method
cpg	362.75	J/molxK	781.53	Joback Method
cpg	369.99	J/molxK	820.63	Joback Method
cpg	376.57	J/molxK	859.74	Joback Method
dvisc	0.0017005	Paxs	377.05	Joback Method
dvisc	0.0009910	Paxs	418.39	Joback Method
dvisc	0.0006365	Paxs	459.74	Joback Method
dvisc	0.0004397	Paxs	501.09	Joback Method
dvisc	0.0003214	Paxs	542.43	Joback Method
dvisc	0.0002456	Paxs	583.77	Joback Method
dvisc	0.0001945	Paxs	625.12	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R31305&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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

Latest version available from:

<https://www.cheméo.com/cid/60-888-0/Benzoic-acid-4-chloro-2-2-dichloroethyl-ester.pdf>

Generated by Cheméo on 2024-04-20 06:23:14.659630943 +0000 UTC m=+15883443.580208265.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.