chloralose

Other names: 1-[6-hydroxy-2-(trichloromethyl)-3a,5,6,6a-tetrahydrofuro[4,5-d][1,3]dioxol-5-yl]ethane-1,2
Inchi: InChI=1S/C8H11Cl3O6/c9-8(10,11)7-16-5-3(14)4(2(13)1-12)15-6(5)17-7/h2-7,12-14H,1H
InchiKey: OJYGBLRPYBAHRT-UHFFFAOYSA-N
Formula: C8H11Cl3O6
SMILES: OCC(O)C1OC2OC(C(Cl)(Cl)Cl)OC2C1O
Mol. weight [g/mol]: 309.53

Physical Properties

Property code	Value	Unit	Source
gf	-613.56	kJ/mol	Joback Method
hf	-1050.13	kJ/mol	Joback Method
hfus	49.61	kJ/mol	Joback Method
hvap	107.68	kJ/mol	Joback Method
log10ws	-1.84		Aqueous Solubility Prediction Method
log10ws	-1.84		Estimated Solubility Method
logp	-0.463		Crippen Method
mcvol	173.800	ml/mol	McGowan Method
pc	3857.88	kPa	Joback Method
tb	856.46	K	Joback Method
tc	1060.59	K	Joback Method
tf	535.39	K	Joback Method
vc	0.628	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	527.40	J/mol×K	856.46	Joback Method
cpg	560.99	J/mol×K	1026.57	Joback Method
cpg	555.15	J/mol×K	992.55	Joback Method
cpg	548.92	J/mol×K	958.52	Joback Method
cpg	542.26	J/mol×K	924.50	Joback Method
cpg	535.11	J/mol×K	890.48	Joback Method

cpg	566.52	J/mol×K	1060.59	Joback Method
dvisc	0.0000063	Pa×s	856.46	Joback Method
dvisc	0.0000103	Pa×s	802.95	Joback Method
dvisc	0.0000181	Pa×s	749.44	Joback Method
dvisc	0.0000347	Pa×s	695.92	Joback Method
dvisc	0.0000742	Pa×s	642.41	Joback Method
dvisc	0.0001822	Pa×s	588.90	Joback Method
dvisc	0.0005350	Pa×s	535.39	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Aqueous Solubility Prediction Method:	http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
Estimated Solubility Method:	http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume