

Benzaldehyde, 5-chloro-2-hydroxy-

Other names:	Salicylaldehyde, 5-chloro- 2-Hydroxy-5-chlorobenzaldehyde 4-Chloro-2-formylphenol 5-Chloro-2-hydroxybenzaldehyde 5-Chlorosalicylaldehyde Benzaldehyde, 2-hydroxy, 5-chloro
Inchi:	InChI=1S/C7H5ClO2/c8-6-1-2-7(10)5(3-6)4-9/h1-4,10H
InchiKey:	FUGKCSRLAQKUHG-UHFFFAOYSA-N
Formula:	C7H5ClO2
SMILES:	O=Cc1cc(Cl)ccc1O
Mol. weight [g/mol]:	156.57
CAS:	635-93-8

Physical Properties

Property code	Value	Unit	Source
gf	-155.23	kJ/mol	Joback Method
hf	-241.38	kJ/mol	Joback Method
hfus	19.81	kJ/mol	Joback Method
hvap	58.23	kJ/mol	Joback Method
log10ws	-1.95		Crippen Method
logp	1.858		Crippen Method
mcvol	105.410	ml/mol	McGowan Method
pc	5190.64	kPa	Joback Method
rinpol	1217.00		NIST Webbook
rinpol	1184.00		NIST Webbook
rinpol	1184.00		NIST Webbook
rinpol	1190.00		NIST Webbook
rinpol	1206.00		NIST Webbook
rinpol	1169.00		NIST Webbook
rinpol	1206.00		NIST Webbook
rinpol	1206.00		NIST Webbook
rinpol	1174.00		NIST Webbook
ripol	1966.00		NIST Webbook
ripol	1969.00		NIST Webbook
ripol	1966.00		NIST Webbook
ripol	1965.00		NIST Webbook
tb	557.93	K	Joback Method

tc	797.69	K	Joback Method
tf	391.23	K	Joback Method
vc	0.351	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	217.03	J/mol×K	557.93	Joback Method
cpg	250.42	J/mol×K	757.73	Joback Method
cpg	244.76	J/mol×K	717.77	Joback Method
cpg	238.67	J/mol×K	677.81	Joback Method
cpg	232.07	J/mol×K	637.85	Joback Method
cpg	224.89	J/mol×K	597.89	Joback Method
cpg	255.74	J/mol×K	797.69	Joback Method
dvisc	0.0000750	Paxs	557.93	Joback Method
dvisc	0.0001075	Paxs	530.15	Joback Method
dvisc	0.0001603	Paxs	502.36	Joback Method
dvisc	0.0002504	Paxs	474.58	Joback Method
dvisc	0.0004135	Paxs	446.80	Joback Method
dvisc	0.0007298	Paxs	419.01	Joback Method
dvisc	0.0013964	Paxs	391.23	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C635938&Units=SI

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

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