Benzenemethanol, 2-chloro-

Other names:	Benzyl alcohol, o-chloro- o-Chlorobenzyl alcohol 2-Chlorobenzyl alcohol ortho-Chlorobenzyl alcohol (2-Chloro-phenyl)-methanol
Inchi:	InChI=1S/C7H7ClO/c8-7-4-2-1-3-6(7)5-9/h1-4,9H,5H2
InchiKey:	MBYQPPXEXWRMQC-UHFFFAOYSA-N
Formula:	C7H7ClO
SMILES:	OCc1ccccc1Cl
Mol. weight [g/mol]:	142.58
CAS:	17849-38-6

Physical Properties

Property code	Value	Unit	Source
gf	-37.91	kJ/mol	Joback Method
hf	-130.72	kJ/mol	Joback Method
hfus	15.82	kJ/mol	Joback Method
hvap	55.18	kJ/mol	Joback Method
log10ws	-2.30		Crippen Method
logp	1.832		Crippen Method
mcvol	103.840	ml/mol	McGowan Method
pc	4333.96	kPa	Joback Method
tb	503.20	K	NIST Webbook
tb	500.20	K	NIST Webbook
tc	727.48	K	Joback Method
tf	298.33	K	Joback Method
vc	0.388	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	204.63	J/mol×K	520.83	Joback Method
cpg	213.25	J/mol×K	555.27	Joback Method
cpg	221.36	J/mol×K	589.71	Joback Method

cpg	228.96	J/mol×K	624.16	Joback Method
cpg	236.09	J/mol×K	658.60	Joback Method
cpg	242.77	J/mol×K	693.04	Joback Method
cpg	249.01	J/mol×K	727.48	Joback Method
dvisc	0.0085009	Pa×s	298.33	Joback Method
dvisc	0.0029645	Pa×s	335.41	Joback Method
dvisc	0.0012750	Pa×s	372.50	Joback Method
dvisc	0.0006389	Pa×s	409.58	Joback Method
dvisc	0.0003591	Pa×s	446.66	Joback Method
dvisc	0.0002205	Pa×s	483.75	Joback Method
dvisc	0.0001451	Pa×s	520.83	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	375.70	K	3.70	NIST Webbook

Sources

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=C17849386&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume