

4-Chlorophenyl chloroformate

Other names:	p-Chlorophenyl chloroformate
Inchi:	InChI=1S/C7H4Cl2O2/c8-5-1-3-6(4-2-5)11-7(9)10/h1-4H
InchiKey:	RYWGPCLTVXMMHO-UHFFFAOYSA-N
Formula:	C7H4Cl2O2
SMILES:	O=C(Cl)Oc1ccc(Cl)cc1
Mol. weight [g/mol]:	191.01
CAS:	7693-45-0

Physical Properties

Property code	Value	Unit	Source
gf	-146.94	kJ/mol	Joback Method
hf	-239.03	kJ/mol	Joback Method
hfus	18.72	kJ/mol	Joback Method
hvap	52.04	kJ/mol	Joback Method
log10ws	-3.18		Crippen Method
logp	3.078		Crippen Method
mcvol	117.650	ml/mol	McGowan Method
pc	3896.50	kPa	Joback Method
tb	542.37	K	Joback Method
tc	777.51	K	Joback Method
tf	339.59	K	Joback Method
vc	0.442	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	217.11	J/molxK	542.37	Joback Method
cpg	225.62	J/molxK	581.56	Joback Method
cpg	233.56	J/molxK	620.75	Joback Method
cpg	240.95	J/molxK	659.94	Joback Method
cpg	247.78	J/molxK	699.13	Joback Method
cpg	254.07	J/molxK	738.32	Joback Method
cpg	259.83	J/molxK	777.51	Joback Method
dvisc	0.0016588	Paxs	339.59	Joback Method

dvisc	0.0010650	Paxs	373.39	Joback Method
dvisc	0.0007359	Paxs	407.18	Joback Method
dvisc	0.0005382	Paxs	440.98	Joback Method
dvisc	0.0004115	Paxs	474.78	Joback Method
dvisc	0.0003261	Paxs	508.57	Joback Method
dvisc	0.0002660	Paxs	542.37	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	379.00 ± 1.00	K	2.10	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7693450&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

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

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