

1-Chloropentane-2-one

Inchi:	InChI=1S/C5H9ClO/c1-2-3-5(7)4-6/h2-4H2,1H3
InchiKey:	MGTGUEKJBFTQQW-UHFFFAOYSA-N
Formula:	C5H9ClO
SMILES:	CCCC(=O)CCl
Mol. weight [g/mol]:	120.58

Physical Properties

Property code	Value	Unit	Source
gf	-149.63	kJ/mol	Joback Method
hf	-274.85	kJ/mol	Joback Method
hfus	14.50	kJ/mol	Joback Method
hvap	37.86	kJ/mol	Joback Method
log10ws	-1.35		Crippen Method
logp	1.594		Crippen Method
mcpvol	95.120	ml/mol	McGowan Method
pc	3577.07	kPa	Joback Method
rinpol	851.00		NIST Webbook
rinpol	851.00		NIST Webbook
rinpol	878.00		NIST Webbook
tb	405.10	K	Joback Method
tc	591.48	K	Joback Method
tf	225.96	K	Joback Method
vc	0.370	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	166.17	J/mol×K	405.10	Joback Method
cpg	174.65	J/mol×K	436.16	Joback Method
cpg	182.77	J/mol×K	467.23	Joback Method
cpg	190.54	J/mol×K	498.29	Joback Method
cpg	197.97	J/mol×K	529.35	Joback Method
cpg	205.06	J/mol×K	560.42	Joback Method
cpg	211.83	J/mol×K	591.48	Joback Method

dvisc	0.0037554	Paxs	225.96	Joback Method
dvisc	0.0020219	Paxs	255.82	Joback Method
dvisc	0.0012390	Paxs	285.67	Joback Method
dvisc	0.0008330	Paxs	315.53	Joback Method
dvisc	0.0005998	Paxs	345.39	Joback Method
dvisc	0.0004551	Paxs	375.24	Joback Method
dvisc	0.0003596	Paxs	405.10	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R632861&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
mvol:	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

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