

5-Chlorovaleric acid, 4-methoxyphenyl ester

Inchi:	InChI=1S/C12H15ClO3/c1-15-10-5-7-11(8-6-10)16-12(14)4-2-3-9-13/h5-8H,2-4,9H2,1H3
InchiKey:	KGAVHPXSHLZLNB-UHFFFAOYSA-N
Formula:	C12H15ClO3
SMILES:	<chem>COc1ccc(OC(=O)CCCCl)cc1</chem>
Mol. weight [g/mol]:	242.70

Physical Properties

Property code	Value	Unit	Source
gf	-197.91	kJ/mol	Joback Method
hf	-458.71	kJ/mol	Joback Method
hfus	28.66	kJ/mol	Joback Method
hvap	61.20	kJ/mol	Joback Method
log10ws	-3.31		Crippen Method
logp	3.010		Crippen Method
mvol	181.730	ml/mol	McGowan Method
pc	2351.92	kPa	Joback Method
rinpol	1849.00		NIST Webbook
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tb	641.76	K	Joback Method
tc	850.40	K	Joback Method
tf	388.25	K	Joback Method
vc	0.691	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	446.54	J/molxK	641.76	Joback Method
cpg	460.30	J/molxK	676.53	Joback Method
cpg	473.27	J/molxK	711.31	Joback Method
cpg	485.45	J/molxK	746.08	Joback Method
cpg	496.85	J/molxK	780.85	Joback Method
cpg	507.48	J/molxK	815.63	Joback Method
cpg	517.34	J/molxK	850.40	Joback Method
dvisc	0.0011397	Paxs	388.25	Joback Method

dvisc	0.0006730	Paxs	430.50	Joback Method
dvisc	0.0004366	Paxs	472.75	Joback Method
dvisc	0.0003041	Paxs	515.00	Joback Method
dvisc	0.0002237	Paxs	557.26	Joback Method
dvisc	0.0001719	Paxs	599.51	Joback Method
dvisc	0.0001367	Paxs	641.76	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U307977&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	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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