

5-Chlorovaleric acid, 3,4-dichlorophenyl ester

Inchi:	InChI=1S/C11H11Cl3O2/c12-6-2-1-3-11(15)16-8-4-5-9(13)10(14)7-8/h4-5,7H,1-3,6H2
InchiKey:	BYNHRZMXLGSQAV-UHFFFAOYSA-N
Formula:	C11H11Cl3O2
SMILES:	O=C(CCCCCl)Oc1ccc(Cl)c(Cl)c1
Mol. weight [g/mol]:	281.56

Physical Properties

Property code	Value	Unit	Source
gf	-134.82	kJ/mol	Joback Method
hf	-348.80	kJ/mol	Joback Method
hfus	32.89	kJ/mol	Joback Method
hvap	65.99	kJ/mol	Joback Method
log10ws	-4.56		Crippen Method
logp	4.308		Crippen Method
mvol	186.250	ml/mol	McGowan Method
pc	2407.64	kPa	Joback Method
rinpol	1969.00		NIST Webbook
rinpol	1969.00		NIST Webbook
tb	676.30	K	Joback Method
tc	898.44	K	Joback Method
tf	427.11	K	Joback Method
vc	0.715	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	420.38	J/molxK	676.30	Joback Method
cpg	431.66	J/molxK	713.32	Joback Method
cpg	442.18	J/molxK	750.35	Joback Method
cpg	451.95	J/molxK	787.37	Joback Method
cpg	461.00	J/molxK	824.40	Joback Method
cpg	469.33	J/molxK	861.42	Joback Method
cpg	476.98	J/molxK	898.44	Joback Method
dvisc	0.0010595	Paxs	427.11	Joback Method

dvisc	0.0006769	Paxs	468.64	Joback Method
dvisc	0.0004652	Paxs	510.17	Joback Method
dvisc	0.0003383	Paxs	551.71	Joback Method
dvisc	0.0002572	Paxs	593.24	Joback Method
dvisc	0.0002027	Paxs	634.77	Joback Method
dvisc	0.0001645	Paxs	676.30	Joback Method

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=U307979&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

Latest version available from:

<https://www.chemeo.com/cid/124-908-6/5-Chlorovaleric-acid-3-4-dichlorophenyl-ester.pdf>

Generated by Cheméo on 2024-04-30 19:19:48.548604606 +0000 UTC m=+16794037.469181917.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.