

cyclopentanecarbonyl chloride

Inchi:	InChI=1S/C6H9ClO/c7-6(8)5-3-1-2-4-5/h5H,1-4H2
InchiKey:	WEPUZBYKXNKSDH-UHFFFAOYSA-N
Formula:	C6H9ClO
SMILES:	O=C(Cl)C1CCCC1
Mol. weight [g/mol]:	132.59
CAS:	4524-93-0

Physical Properties

Property code	Value	Unit	Source
gf	-104.66	kJ/mol	Joback Method
hf	-235.01	kJ/mol	Joback Method
hfus	11.03	kJ/mol	Joback Method
hvap	40.34	kJ/mol	Joback Method
log10ws	-1.92		Crippen Method
logp	1.942		Crippen Method
mvol	98.350	ml/mol	McGowan Method
pc	3965.51	kPa	Joback Method
tb	443.26	K	Joback Method
tc	660.56	K	Joback Method
tf	248.13	K	Joback Method
vc	0.367	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	184.38	J/molxK	443.26	Joback Method
cpg	197.04	J/molxK	479.48	Joback Method
cpg	208.95	J/molxK	515.69	Joback Method
cpg	220.13	J/molxK	551.91	Joback Method
cpg	230.61	J/molxK	588.13	Joback Method
cpg	240.41	J/molxK	624.34	Joback Method
cpg	249.58	J/molxK	660.56	Joback Method
dvisc	0.0038173	Paxs	248.13	Joback Method
dvisc	0.0021757	Paxs	280.65	Joback Method

dvisc	0.0013937	Paxs	313.17	Joback Method
dvisc	0.0009707	Paxs	345.69	Joback Method
dvisc	0.0007196	Paxs	378.22	Joback Method
dvisc	0.0005593	Paxs	410.74	Joback Method
dvisc	0.0004511	Paxs	443.26	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	327.50 ± 0.50	K	2.00	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=C4524930&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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