Cyclopentanecarbonylchloride

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

Physical Properties

Property code	Value	Unit	Source
hf	-240.23	kJ/mol	Cheméo Relay (1.0)
hfus	11.03	kJ/mol	Joback Method
hvap	39.90	kJ/mol	Cheméo Relay (1.0)
ie	10.05	eV	Cheméo Relay (1.0)
log10ws	-2.23		Cheméo Relay (1.0)
logp	1.942		Crippen Method
mcvol	98.350	ml/mol	McGowan Method
tb	435.20	K	Cheméo Relay (1.0)
tf	201.22	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	184.38	J/mol×K	443.26	Joback Method
cpg	197.04	J/mol×K	479.48	Joback Method
cpg	208.95	J/mol×K	515.69	Joback Method
cpg	220.13	J/mol×K	551.91	Joback Method
cpg	230.61	J/mol×K	588.13	Joback Method
cpg	240.41	J/mol×K	624.34	Joback Method
cpg	249.58	J/mol×K	660.56	Joback Method
dvisc	0.0038173	Pa×s	248.13	Joback Method
dvisc	0.0021757	Pa×s	280.65	Joback Method
dvisc	0.0013937	Pa×s	313.17	Joback Method
dvisc	0.0009707	Pa×s	345.69	Joback Method
dvisc	0.0007196	Pa×s	378.22	Joback Method
dvisc	0.0005593	Pa×s	410.74	Joback Method

dvisc	0.0004511	Pa×s	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

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):
Cheméo Relay (1.0, beta):
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C4524930&Units=SI
Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hvap: Enthalpy of vaporization at standard conditions
ie: Ionization energy
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume
tb: Normal Boiling Point Temperature
tbrp: Boiling point at reduced pressure
tf: Normal melting (fusion) point

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