4-chlorobut-1-ene

Inchi: InChI=1S/C4H7Cl/c1-2-3-4-5/h2H,1,3-4H2
InchiKey: WKEVRZCQFQDCIR-UHFFFAOYSA-N
Formula: C4H7Cl
SMILES: C=CCCCl
Mol. weight [g/mol]: 90.55
CAS: 927-73-1

Physical Properties

Property code	Value	Unit	Source
gf	58.71	kJ/mol	Joback Method
hf	-28.90	kJ/mol	NIST Webbook
hfus	9.03	kJ/mol	Joback Method
hvap	28.21	kJ/mol	Joback Method
log10ws	-1.50		Crippen Method
logp	1.801		Crippen Method
mcvol	75.160	ml/mol	McGowan Method
pc	3920.94	kPa	Joback Method
tb	348.00 ± 5.00	K	NIST Webbook
tb	347.00 ± 4.00	K	NIST Webbook
tc	501.04	K	Joback Method
tf	163.00	K	Joback Method
vc	0.289	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	106.72	J/mol×K	325.03	Joback Method
cpg	113.50	J/mol×K	354.37	Joback Method
cpg	119.99	J/mol×K	383.70	Joback Method
cpg	126.20	J/mol×K	413.04	Joback Method
cpg	132.13	J/mol×K	442.37	Joback Method
cpg	137.80	J/mol×K	471.71	Joback Method
cpg	143.22	J/mol×K	501.04	Joback Method
dvisc	0.0029600	Pa×s	163.00	Joback Method

dvisc	0.0014822	Pa×s	190.00	Joback Method
dvisc	0.0008816	Pa×s	217.01	Joback Method
dvisc	0.0005883	Pa×s	244.01	Joback Method
dvisc	0.0004255	Pa×s	271.02	Joback Method
dvisc	0.0003264	Pa×s	298.02	Joback Method
dvisc	0.0002616	Pa×s	325.03	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	348.20	K	103.00	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=C927731&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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