Bornyl chloride

Other names:	Bicyclo[2.2.1]heptane, 2-chloro-1,7,7-trimethyl-, endo-
	Bornane, 2-chloro-, endo-
	Turpentine camphor
	2-Chlorocamphane
	Terpene hydrochloride
	endo-2-Chloro-1,7,7-trimethylbicyclo[2.2.1]heptane
	Pinene hydrochloride
	endo-2-chlorobornane
Inchi:	InChI=1S/C10H17Cl/c1-9(2)7-4-5-10(9,3)8(11)6-7/h7-8H,4-6H2,1-3H3
InchiKey:	XXZAOMJCZBZKPV-UHFFFAOYSA-N
Formula:	C10H17Cl
SMILES:	CC1(C)C2CCC1(C)C(Cl)C2
Mol. weight [g/mol]:	172.69
CAS:	464-41-5

Physical Properties

Property code	Value	Unit	Source
gf	104.39	kJ/mol	Joback Method
hf	-136.23	kJ/mol	Joback Method
hfus	9.57	kJ/mol	Joback Method
hvap	39.32	kJ/mol	Joback Method
log10ws	-3.34		Crippen Method
logp	3.440		Crippen Method
mcvol	142.280	ml/mol	McGowan Method
pc	2752.67	kPa	Joback Method
tb	474.52	K	Joback Method
tc	695.58	K	Joback Method
tf	404.00 ± 4.00	K	NIST Webbook
tf	400.00 ± 3.00	K	NIST Webbook
vc	0.544	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	322.18	J/mol×K	474.52	Joback Method
cpg	341.45	J/mol×K	511.36	Joback Method
cpg	359.03	J/mol×K	548.21	Joback Method
cpg	375.17	J/mol×K	585.05	Joback Method
cpg	390.11	J/mol×K	621.90	Joback Method
cpg	404.10	J/mol×K	658.74	Joback Method
cpg	417.38	J/mol×K	695.58	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C464415&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

cpg:	Ideal gas heat capacity
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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume