Benzene, 2-chloro-1-methyl-4-(1-methylethyl)-

Other names:	p-Cymene, 2-chloro-
	Carvacryl chloride
	Septol
	2-Chloro-4-isopropyltoluene
	2-Chlorocymol
Inchi:	InChI=1S/C10H13Cl/c1-7(2)9-5-4-8(3)10(11)6-9/h4-7H,1-3H3
InchiKey:	JVIGKRUGGYKFSL-UHFFFAOYSA-N
Formula:	C10H13Cl
SMILES:	Cc1ccc(C(C)C)cc1Cl
Mol. weight [g/mol]:	168.66
CAS:	4395-79-3

Physical Properties

Property code	Value	Unit	Source
gf	112.10	kJ/mol	Joback Method
hf	-57.16	kJ/mol	Joback Method
hfus	15.59	kJ/mol	Joback Method
hvap	45.45	kJ/mol	Joback Method
log10ws	-3.82		Crippen Method
logp	3.772		Crippen Method
mcvol	140.240	ml/mol	McGowan Method
pc	2752.67	kPa	Joback Method
tb	490.75 ± 0.50	K	NIST Webbook
tc	719.75	K	Joback Method
tf	268.84	K	Joback Method
vc	0.530	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.03	J/mol×K	501.83	Joback Method
cpg	300.00	J/mol×K	538.15	Joback Method
cpg	313.20	J/mol×K	574.47	Joback Method
cpg	325.66	J/mol×K	610.79	Joback Method

cpg	337.40	J/mol×K	647.11	Joback Method
cpg	348.45	J/mol×K	683.43	Joback Method
cpg	358.83	J/mol×K	719.75	Joback Method
dvisc	0.0023579	Pa×s	268.84	Joback Method
dvisc	0.0012266	Pa×s	307.67	Joback Method
dvisc	0.0007387	Pa×s	346.50	Joback Method
dvisc	0.0004928	Pa×s	385.34	Joback Method
dvisc	0.0003540	Pa×s	424.17	Joback Method
dvisc	0.0002688	Pa×s	463.00	Joback Method
dvisc	0.0002130	Pa×s	501.83	Joback Method
hvapt	49.30	kJ/mol	445.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C4395793&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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
hvapt: Enthalpy of vaporization at a given temperature
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