Phenol, 2-chloro-5-methyl-

Other names:	m-Cresol, 6-chloro-
	2-Chloro-5-methylphenol
	3-Methyl-6-chlorophenol
	5-Methyl-2-chlorophenol
	6-Chloro-m-cresol
	6-Chloro-3-methylphenol
Inchi:	InChI=1S/C7H7ClO/c1-5-2-3-6(8)7(9)4-5/h2-4,9H,1H3
InchiKey:	SMFHPCZZAAMJJO-UHFFFAOYSA-N
Formula:	C7H7ClO
SMILES:	Cc1ccc(Cl)c(O)c1
Mol. weight [g/mol]:	142.58
CAS:	615-74-7

Physical Properties

Property code	Value	Unit	Source
gf	-55.71	kJ/mol	Joback Method
hf	-155.80	kJ/mol	Joback Method
hfus	17.52	kJ/mol	Joback Method
hvap	51.51	kJ/mol	Joback Method
log10ws	-2.18		Crippen Method
logp	2.354		Crippen Method
mcvol	103.840	ml/mol	McGowan Method
pc	4678.49	kPa	Joback Method
rinpol	1111.20		NIST Webbook
rinpol	1111.20		NIST Webbook
tb	469.20	K	NIST Webbook
tb	471.00 ± 5.00	K	NIST Webbook
tc	746.12	K	Joback Method
tf	319.20 ± 3.00	K	NIST Webbook
vc	0.335	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	206.51	J/mol×K	509.27	Joback Method
cpg	246.99	J/mol×K	706.65	Joback Method
cpg	240.10	J/mol×K	667.17	Joback Method
cpg	232.68	J/mol×K	627.70	Joback Method
cpg	224.67	J/mol×K	588.22	Joback Method
cpg	215.97	J/mol×K	548.75	Joback Method
cpg	253.43	J/mol×K	746.12	Joback Method
dvisc	0.0000896	Pa×s	509.27	Joback Method
dvisc	0.0001330	Pa×s	482.60	Joback Method
dvisc	0.0002067	Pa×s	455.92	Joback Method
dvisc	0.0003392	Pa×s	429.25	Joback Method
dvisc	0.0005946	Pa×s	402.58	Joback Method
dvisc	0.0011285	Pa×s	375.90	Joback Method
dvisc	0.0023623	Pa×s	349.23	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C615747&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
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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume