Phenol, 5-methoxy-2,3,4-trimethyl-

Other names: 3-Methoxy-4,5,6-trimethylphenol
5-Methoxy-2,3,4-trimethylphenol
Inchi: InChI=1S/C10H14O2/c1-6-7(2)9(11)5-10(12-4)8(6)3/h5,11H,1-4H3
InchiKey: LFUKZFVMPZVLII-UHFFFAOYSA-N
Formula: C10H14O2
SMILES: COc1cc(O)c(C)c(C)c1C
Mol. weight [g/mol]: 166.22
CAS: 34883-02-8

Physical Properties

Property code	Value	Unit	Source
gf	-142.78	kJ/mol	Joback Method
hf	-357.14	kJ/mol	Joback Method
hfus	21.50	kJ/mol	Joback Method
hvap	57.54	kJ/mol	Joback Method
log10ws	-2.57		Crippen Method
logp	2.326		Crippen Method
mcvol	139.740	ml/mol	McGowan Method
pc	3228.31	kPa	Joback Method
ripol	2382.00		NIST Webbook
ripol	2382.00		NIST Webbook
tb	572.86	K	Joback Method
tc	791.88	K	Joback Method
tf	400.39	K	Joback Method
vc	0.471	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	333.80	J/mol×K	572.86	Joback Method
cpg	346.41	J/mol×K	609.36	Joback Method
cpg	358.37	J/mol×K	645.87	Joback Method
cpg	369.71	J/mol×K	682.37	Joback Method
cpg	380.48	J/mol×K	718.88	Joback Method

cpg	390.71	J/mol×K	755.38	Joback Method
cpg	400.45	J/mol×K	791.88	Joback Method
dvisc	0.0006116	Pa×s	400.39	Joback Method
dvisc	0.0003257	Pa×s	429.13	Joback Method
dvisc	0.0001877	Pa×s	457.88	Joback Method
dvisc	0.0001155	Pa×s	486.62	Joback Method
dvisc	0.0000750	Pa×s	515.37	Joback Method
dvisc	0.0000510	Pa×s	544.12	Joback Method
dvisc	0.0000360	Pa×s	572.86	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C34883028&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
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume
pc: Critical Pressure
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume