2-Allyl-4-methylphenol

Other names: Phenol, 4-methyl-2-(2-propenyl)-
2-Allyl-p-cresol
Inchi: InChI=1S/C10H12O/c1-3-4-9-7-8(2)5-6-10(9)11/h3,5-7,11H,1,4H2,2H3
InchiKey: JVXJWGPWQBPZOI-UHFFFAOYSA-N
Formula: C10H12O
SMILES: C=CCc1cc(C)ccc1O
Mol. weight [g/mol]: 148.20
CAS: 6628-06-4

Physical Properties

Property code	Value	Unit	Source
gf	69.32	kJ/mol	Joback Method
hf	-76.55	kJ/mol	Joback Method
hfus	19.81	kJ/mol	Joback Method
hvap	53.14	kJ/mol	Joback Method
log10ws	-2.57		Crippen Method
logp	2.429		Crippen Method
mcvol	129.570	ml/mol	McGowan Method
pc	3581.35	kPa	Joback Method
tb	537.16	K	Joback Method
tc	761.51	K	Joback Method
tf	351.36	K	Joback Method
vc	0.434	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	292.39	J/mol×K	537.16	Joback Method
cpg	348.11	J/mol×K	724.12	Joback Method
cpg	338.41	J/mol×K	686.73	Joback Method
cpg	328.08	J/mol×K	649.34	Joback Method
cpg	317.01	J/mol×K	611.94	Joback Method
cpg	305.14	J/mol×K	574.55	Joback Method
cpg	357.24	J/mol×K	761.51	Joback Method

dvisc	0.0000593	Pa×s	537.16	Joback Method
dvisc	0.0000903	Pa×s	506.19	Joback Method
dvisc	0.0001450	Pa×s	475.23	Joback Method
dvisc	0.0002488	Pa×s	444.26	Joback Method
dvisc	0.0004629	Pa×s	413.29	Joback Method
dvisc	0.0009526	Pa×s	382.33	Joback Method
dvisc	0.0022258	Pa×s	351.36	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6628064&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume