Benzaldehyde, 2-(2-propenyloxy)-

Other names:	Benzaldehyde, o-(allyloxy)-
	o-(Allyloxy)benzaldehyde
	2-(Allyloxy)benzaldehyde
Inchi:	InChI=1S/C10H10O2/c1-2-7-12-10-6-4-3-5-9(10)8-11/h2-6,8H,1,7H2
InchiKey:	BXCJDECTRRMSCV-UHFFFAOYSA-N
Formula:	C10H10O2
SMILES:	C=CCOc1ccccc1C=O
Mol. weight [g/mol]:	162.19
CAS:	28752-82-1

Physical Properties

Property code	Value	Unit	Source
gf	19.42	kJ/mol	Joback Method
hf	-117.04	kJ/mol	Joback Method
hfus	17.50	kJ/mol	Joback Method
hvap	49.25	kJ/mol	Joback Method
log10ws	-2.52		Crippen Method
logp	2.064		Crippen Method
mcvol	131.140	ml/mol	McGowan Method
pc	3217.33	kPa	Joback Method
tb	527.62	K	Joback Method
tc	740.74	K	Joback Method
tf	303.87	K	Joback Method
vc	0.503	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	282.73	J/mol×K	527.62	Joback Method
cpg	294.93	J/mol×K	563.14	Joback Method
cpg	306.45	J/mol×K	598.66	Joback Method
cpg	317.30	J/mol×K	634.18	Joback Method
cpg	327.49	J/mol×K	669.70	Joback Method
cpg	337.05	J/mol×K	705.22	Joback Method

cpg	346.00	J/mol×K	740.74	Joback Method
dvisc	0.0018485	Pa×s	303.87	Joback Method
dvisc	0.0010840	Pa×s	341.16	Joback Method
dvisc	0.0007062	Pa×s	378.45	Joback Method
dvisc	0.0004968	Pa×s	415.74	Joback Method
dvisc	0.0003703	Pa×s	453.04	Joback Method
dvisc	0.0002887	Pa×s	490.33	Joback Method
dvisc	0.0002331	Pa×s	527.62	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	403.00	K	1.30	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C28752821&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
tb: Normal Boiling Point Temperature

tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume