

Benzaldehyde, 4-(2-propenyloxy)-

Other names:	p-(Allyloxy)benzaldehyde 4-(Allyloxy)benzaldehyde
Inchi:	InChI=1S/C10H10O2/c1-2-7-12-10-5-3-9(8-11)4-6-10/h2-6,8H,1,7H2
InchiKey:	TYNJQOJWNMZQFZ-UHFFFAOYSA-N
Formula:	C10H10O2
SMILES:	<chem>C=CCOc1ccc(C=O)cc1</chem>
Mol. weight [g/mol]:	162.19
CAS:	40663-68-1

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
mvol	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/molxK	527.62	Joback Method
cpg	294.93	J/molxK	563.14	Joback Method
cpg	306.45	J/molxK	598.66	Joback Method
cpg	317.30	J/molxK	634.18	Joback Method
cpg	327.49	J/molxK	669.70	Joback Method
cpg	337.05	J/molxK	705.22	Joback Method
cpg	346.00	J/molxK	740.74	Joback Method

dvisc	0.0018485	Paxs	303.87	Joback Method
dvisc	0.0010840	Paxs	341.16	Joback Method
dvisc	0.0007062	Paxs	378.45	Joback Method
dvisc	0.0004968	Paxs	415.74	Joback Method
dvisc	0.0003703	Paxs	453.04	Joback Method
dvisc	0.0002887	Paxs	490.33	Joback Method
dvisc	0.0002331	Paxs	527.62	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	424.50 ± 1.50	K	2.30	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C40663681&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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