

p-Nonyloxybenzaldehyde

Other names:	4-n-Nonyloxybenzaldehyde
Inchi:	InChI=1S/C16H24O2/c1-2-3-4-5-6-7-8-13-18-16-11-9-15(14-17)10-12-16/h9-12,14H,2-8,
InchiKey:	OZWJLGGZWZZBKK-UHFFFAOYSA-N
Formula:	C16H24O2
SMILES:	CCCCCCCCCOc1ccc(C=O)cc1
Mol. weight [g/mol]:	248.36
CAS:	50262-46-9

Physical Properties

Property code	Value	Unit	Source
gf	-17.90	kJ/mol	Joback Method
hf	-366.31	kJ/mol	Joback Method
hfus	34.32	kJ/mol	Joback Method
hvap	63.28	kJ/mol	Joback Method
log10ws	-5.18		Crippen Method
logp	4.628		Crippen Method
mcvol	219.980	ml/mol	McGowan Method
pc	1763.93	kPa	Joback Method
tb	668.22	K	Joback Method
tc	860.70	K	Joback Method
tf	373.25	K	Joback Method
vc	0.859	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	599.47	J/molxK	668.22	Joback Method
cpg	616.20	J/molxK	700.30	Joback Method
cpg	632.03	J/molxK	732.38	Joback Method
cpg	646.99	J/molxK	764.46	Joback Method
cpg	661.10	J/molxK	796.54	Joback Method
cpg	674.39	J/molxK	828.62	Joback Method
cpg	686.89	J/molxK	860.70	Joback Method
dvisc	0.0016325	Paxs	373.25	Joback Method

dvisc	0.0008445	Paxs	422.41	Joback Method
dvisc	0.0005012	Paxs	471.57	Joback Method
dvisc	0.0003283	Paxs	520.74	Joback Method
dvisc	0.0002313	Paxs	569.90	Joback Method
dvisc	0.0001723	Paxs	619.06	Joback Method
dvisc	0.0001340	Paxs	668.22	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	454.00	K	0.50	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C50262469&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

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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