Hydroxylamine, O-decyl-

Other names: O-Decylhydroxylamine
Inchi: InChI=1S/C10H23NO/c1-2-3-4-5-6-7-8-9-10-12-11/h2-11H2,1H3
InchiKey: MQNAOOIFODUDES-UHFFFAOYSA-N
Formula: C10H23NO
SMILES: CCCCCCCCCCON
Mol. weight [g/mol]: 173.30
CAS: 29812-79-1

Physical Properties

Property code	Value	Unit	Source
gf	-5.23	kJ/mol	Joback Method
hf	-348.16	kJ/mol	Joback Method
hfus	28.04	kJ/mol	Joback Method
hvap	50.91	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	3.017		Crippen Method
mcvol	167.610	ml/mol	McGowan Method
pc	2187.68	kPa	Joback Method
rinpol	1100.00		NIST Webbook
rinpol	1100.00		NIST Webbook
tb	523.15	K	Joback Method
tc	696.93	K	Joback Method
tf	307.95	K	Joback Method
vc	0.642	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	409.39	J/mol×K	523.15	Joback Method
cpg	424.49	J/mol×K	552.11	Joback Method
cpg	439.01	J/mol×K	581.08	Joback Method
cpg	452.96	J/mol×K	610.04	Joback Method
cpg	466.34	J/mol×K	639.00	Joback Method
cpg	479.17	J/mol×K	667.96	Joback Method

cpg	491.46	J/mol×K	696.93	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C29812791&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
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume