

Nonadecane, 1-chloro-

Other names:	1-Chloro nonadecane
Inchi:	InChI=1S/C19H39Cl/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20/h2-19H2,1H
InchiKey:	ZPHKHTAJPZOPHM-UHFFFAOYSA-N
Formula:	C19H39Cl
SMILES:	CCCCCCCCCCCCCCCCCCCCI
Mol. weight [g/mol]:	302.97
CAS:	62016-76-6

Physical Properties

Property code	Value	Unit	Source
gf	97.17	kJ/mol	Joback Method
hf	-451.23	kJ/mol	Joback Method
hfus	49.16	kJ/mol	Joback Method
hvap	114.70	kJ/mol	NIST Webbook
log10ws	-7.93		Crippen Method
logp	7.877		Crippen Method
mcvol	290.810	ml/mol	McGowan Method
pc	1054.83	kPa	Joback Method
rinpol	360.90		NIST Webbook
rinpol	360.90		NIST Webbook
tb	671.55	K	Joback Method
tc	836.35	K	Joback Method
tf	333.81	K	Joback Method
vc	1.149	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	927.38	J/molxK	836.35	Joback Method
cpg	821.00	J/molxK	671.55	Joback Method
cpg	840.75	J/molxK	699.02	Joback Method
cpg	859.66	J/molxK	726.48	Joback Method
cpg	877.75	J/molxK	753.95	Joback Method
cpg	895.04	J/molxK	781.42	Joback Method

cpg	911.58	J/molxK	808.88	Joback Method
dvisc	0.0000988	Paxs	671.55	Joback Method
dvisc	0.0030255	Paxs	333.81	Joback Method
dvisc	0.0011337	Paxs	390.10	Joback Method
dvisc	0.0005441	Paxs	446.39	Joback Method
dvisc	0.0003078	Paxs	502.68	Joback Method
dvisc	0.0001953	Paxs	558.97	Joback Method
dvisc	0.0001347	Paxs	615.26	Joback Method
hvapt	76.30	kJ/mol	578.00	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C62016766&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
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mccvol:	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

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