

# 2-Chloro-2-methylnonane

<b>Inchi:</b>	InChI=1S/C10H21Cl/c1-4-5-6-7-8-9-10(2,3)11/h4-9H2,1-3H3
<b>InchiKey:</b>	QDJXQCKHBZEIJM-UHFFFAOYSA-N
<b>Formula:</b>	C10H21Cl
<b>SMILES:</b>	CCCCCCCC(C)(C)Cl
<b>Mol. weight [g/mol]:</b>	176.73
<b>CAS:</b>	4325-50-2

## Physical Properties

Property code	Value	Unit	Source
gf	24.23	kJ/mol	Joback Method
hf	-274.22	kJ/mol	Joback Method
hfus	18.44	kJ/mol	Joback Method
hvap	40.94	kJ/mol	Joback Method
log10ws	-4.27		Crippen Method
logp	4.364		Crippen Method
mvol	164.000	ml/mol	McGowan Method
pc	2073.65	kPa	Joback Method
tb	462.40	K	Joback Method
tc	641.37	K	Joback Method
tf	234.80	K	Joback Method
vc	0.633	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	350.93	J/molxK	462.40	Joback Method
cpg	366.90	J/molxK	492.23	Joback Method
cpg	382.10	J/molxK	522.06	Joback Method
cpg	396.56	J/molxK	551.89	Joback Method
cpg	410.30	J/molxK	581.71	Joback Method
cpg	423.36	J/molxK	611.54	Joback Method
cpg	435.78	J/molxK	641.37	Joback Method
dvisc	0.0082387	Paxs	234.80	Joback Method
dvisc	0.0030747	Paxs	272.73	Joback Method

dvisc	0.0014598	Paxs	310.67	Joback Method
dvisc	0.0008150	Paxs	348.60	Joback Method
dvisc	0.0005102	Paxs	386.53	Joback Method
dvisc	0.0003473	Paxs	424.47	Joback Method
dvisc	0.0002518	Paxs	462.40	Joback Method

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.38049e+01
Coeff. B	-3.90604e+03
Coeff. C	-7.43540e+01
Temperature range (K), min.	363.32
Temperature range (K), max.	534.24

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C4325502&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C4325502&amp;Units=SI</a>
<b>The Yaws Handbook of Vapor Pressure:</b>	<a href="https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure">https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l

<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>pvap:</b>	Vapor pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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