

# 1,trans-4-nonadiene

Inchi:	InChI=1S/C9H16/c1-3-5-7-9-8-6-4-2/h3,7,9H,1,4-6,8H2,2H3/b9-7+
InchiKey:	ZHDCVEXTJJYIGZ-VQHVLOKHSA-N
Formula:	C9H16
SMILES:	C=CCC=CCCC
Mol. weight [g/mol]:	124.22

## Physical Properties

Property code	Value	Unit	Source
gf	192.96	kJ/mol	Joback Method
hf	13.56	kJ/mol	Joback Method
hfus	17.99	kJ/mol	Joback Method
hvap	34.92	kJ/mol	Joback Method
log10ws	-3.30		Crippen Method
logp	3.309		Crippen Method
mcvol	129.070	ml/mol	McGowan Method
pc	2530.27	kPa	Joback Method
rinpola	869.90		NIST Webbook
rinpola	869.90		NIST Webbook
tb	406.16	K	Joback Method
tc	580.81	K	Joback Method
tf	184.35	K	Joback Method
vc	0.500	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.68	J/molxK	406.16	Joback Method
cpg	256.14	J/molxK	435.27	Joback Method
cpg	268.99	J/molxK	464.38	Joback Method
cpg	281.24	J/molxK	493.49	Joback Method
cpg	292.93	J/molxK	522.60	Joback Method
cpg	304.08	J/molxK	551.71	Joback Method
cpg	314.71	J/molxK	580.81	Joback Method
dvisc	0.0046945	Paxs	184.35	Joback Method

dvisc	0.0017822	Paxs	221.32	Joback Method
dvisc	0.0008927	Paxs	258.29	Joback Method
dvisc	0.0005317	Paxs	295.25	Joback Method
dvisc	0.0003554	Paxs	332.22	Joback Method
dvisc	0.0002575	Paxs	369.19	Joback Method
dvisc	0.0001978	Paxs	406.16	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R249682&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R249682&amp;Units=SI</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>

## 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>rinpol:</b>	Non-polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/33-409-1/1-trans-4-nonadiene.pdf>

Generated by Cheméo on 2024-04-27 04:48:25.610745284 +0000 UTC m=+16482554.531322605.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.