

# trans-2,trans-6-decadiene

Inchi:	InChI=1S/C11H20/c1-3-5-7-9-11-10-8-6-4-2/h3,5,10-11H,4,6-9H2,1-2H3/b5-3+,11-10+
InchiKey:	WTMFRMMLJJWJRG-SALZOXGJSA-N
Formula:	C11H20
SMILES:	CC=CCCC=CCCC
Mol. weight [g/mol]:	152.28

## Physical Properties

Property code	Value	Unit	Source
gf	202.18	kJ/mol	Joback Method
hf	-35.93	kJ/mol	Joback Method
hfus	24.65	kJ/mol	Joback Method
hvap	40.00	kJ/mol	Joback Method
log10ws	-4.13		Crippen Method
logp	4.089		Crippen Method
mcvol	157.250	ml/mol	McGowan Method
pc	2123.64	kPa	Joback Method
rinpol	976.40		NIST Webbook
tb	459.40	K	Joback Method
tc	636.45	K	Joback Method
tf	203.57	K	Joback Method
vc	0.612	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	328.89	J/mol×K	459.40	Joback Method
cpg	399.94	J/mol×K	606.94	Joback Method
cpg	387.08	J/mol×K	577.43	Joback Method
cpg	373.59	J/mol×K	547.92	Joback Method
cpg	359.41	J/mol×K	518.42	Joback Method
cpg	344.53	J/mol×K	488.91	Joback Method
cpg	412.17	J/mol×K	636.45	Joback Method
dvisc	0.0001584	Paxs	459.40	Joback Method
dvisc	0.0002115	Paxs	416.76	Joback Method

dvisc	0.0003017	Paxs	374.12	Joback Method
dvisc	0.0004715	Paxs	331.49	Joback Method
dvisc	0.0008408	Paxs	288.85	Joback Method
dvisc	0.0018316	Paxs	246.21	Joback Method
dvisc	0.0055290	Paxs	203.57	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R250112&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R250112&amp;Units=SI</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

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