

# 1,cis-5-decadiene

<b>Inchi:</b>	InChI=1S/C10H18/c1-3-5-7-9-10-8-6-4-2/h3,9-10H,1,4-8H2,2H3/b10-9-
<b>InchiKey:</b>	CNCHKZTUPHZPHA-KTKRTIGZSA-N
<b>Formula:</b>	C10H18
<b>SMILES:</b>	C=CCCC=CCCC
<b>Mol. weight [g/mol]:</b>	138.25

## Physical Properties

Property code	Value	Unit	Source
gf	201.38	kJ/mol	Joback Method
hf	-7.08	kJ/mol	Joback Method
hfus	20.58	kJ/mol	Joback Method
hvap	37.14	kJ/mol	Joback Method
log10ws	-3.72		Crippen Method
logp	3.699		Crippen Method
mvol	143.160	ml/mol	McGowan Method
pc	2302.53	kPa	Joback Method
rinpol	961.40		NIST Webbook
rinpol	961.40		NIST Webbook
tb	429.04	K	Joback Method
tc	602.67	K	Joback Method
tf	195.62	K	Joback Method
vc	0.556	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	284.09	J/molxK	429.04	Joback Method
cpg	350.10	J/molxK	573.73	Joback Method
cpg	338.11	J/molxK	544.80	Joback Method
cpg	325.53	J/molxK	515.86	Joback Method
cpg	312.35	J/molxK	486.92	Joback Method
cpg	298.55	J/molxK	457.98	Joback Method
cpg	361.55	J/molxK	602.67	Joback Method
dvisc	0.0001953	Paxs	429.04	Joback Method

dvisc	0.0002559	Paxs	390.14	Joback Method
dvisc	0.0003561	Paxs	351.23	Joback Method
dvisc	0.0005379	Paxs	312.33	Joback Method
dvisc	0.0009137	Paxs	273.43	Joback Method
dvisc	0.0018503	Paxs	234.52	Joback Method
dvisc	0.0049613	Paxs	195.62	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R249588&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R249588&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</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>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/67-459-9/1-cis-5-decadiene.pdf>

Generated by Cheméo on 2024-04-26 07:19:22.796305873 +0000 UTC m=+16405211.716883185.

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