

# 2-Tridecene

<b>Inchi:</b>	InChI=1S/C13H26/c1-3-5-7-9-11-13-12-10-8-6-4-2/h3,5H,4,6-13H2,1-2H3
<b>InchiKey:</b>	XWVHBWQEYOROB-EUHFFFAOYSA-N
<b>Formula:</b>	C13H26
<b>SMILES:</b>	CC=CCCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	182.35
<b>CAS:</b>	19150-20-0

## Physical Properties

Property code	Value	Unit	Source
gf	138.80	kJ/mol	Joback Method
hf	-194.43	kJ/mol	Joback Method
hfus	29.63	kJ/mol	Joback Method
hvap	44.49	kJ/mol	Joback Method
log10ws	-5.12		Crippen Method
logp	5.093		Crippen Method
mvol	189.730	ml/mol	McGowan Method
pc	1716.03	kPa	Joback Method
rinpol	1296.00		NIST Webbook
rinpol	220.20		NIST Webbook
rinpol	1296.00		NIST Webbook
rinpol	1318.00		NIST Webbook
tb	501.00	K	Joback Method
tc	667.97	K	Joback Method
tf	231.19	K	Joback Method
vc	0.744	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	439.01	J/molxK	501.00	Joback Method
cpg	456.28	J/molxK	528.83	Joback Method
cpg	472.83	J/molxK	556.66	Joback Method
cpg	488.69	J/molxK	584.48	Joback Method
cpg	503.87	J/molxK	612.31	Joback Method

cpg	518.42	J/mol×K	640.14	Joback Method
cpg	532.34	J/mol×K	667.97	Joback Method
dvisc	0.0056599	Paxs	231.19	Joback Method
dvisc	0.0019529	Paxs	276.16	Joback Method
dvisc	0.0009078	Paxs	321.13	Joback Method
dvisc	0.0005093	Paxs	366.10	Joback Method
dvisc	0.0003243	Paxs	411.06	Joback Method
dvisc	0.0002257	Paxs	456.03	Joback Method
dvisc	0.0001677	Paxs	501.00	Joback Method

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.61080e+01
Coeff. B	-4.79271e+03
Coeff. C	-8.17990e+01
Temperature range (K), min.	384.74
Temperature range (K), max.	525.71

## Sources

<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=C19150200&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C19150200&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>

## 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>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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