

# 2-Hexene, 5-methyl-, (E)-

<b>Other names:</b>	(E)-(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> CH=CHCH <sub>3</sub> (E)-5-METHYL-2-HEXENE 5-METHYL-TRANS-2-HEXENE 5-Methyl-2-hexene, trans TRANS-5-METHYL-2-HEXENE
<b>Inchi:</b>	InChI=1S/C7H14/c1-4-5-6-7(2)3/h4-5,7H,6H2,1-3H3/b5-4+
<b>InchiKey:</b>	GHBKCPRDHLITSE-SNAWJCMRSA-N
<b>Formula:</b>	C <sub>7</sub> H <sub>14</sub>
<b>SMILES:</b>	CC=CCC(C)C
<b>Mol. weight [g/mol]:</b>	98.19
<b>CAS:</b>	7385-82-2

## Physical Properties

Property code	Value	Unit	Source
gf	85.84	kJ/mol	Joback Method
hf	-75.87	kJ/mol	Joback Method
hfus	10.56	kJ/mol	Joback Method
hvap	30.75	kJ/mol	Joback Method
ie	8.92 ± 0.01	eV	NIST Webbook
log10ws	-2.36		Crippen Method
logp	2.609		Crippen Method
mcvol	105.190	ml/mol	McGowan Method
pc	2986.06	kPa	Joback Method
rinpol	669.00		NIST Webbook
rinpol	668.00		NIST Webbook
rinpol	668.00		NIST Webbook
rinpol	668.00		NIST Webbook
rinpol	659.00		NIST Webbook
rinpol	668.00		NIST Webbook
rinpol	668.00		NIST Webbook
rinpol	660.00		NIST Webbook
rinpol	660.00		NIST Webbook
rinpol	660.00		NIST Webbook
rinpol	664.00		NIST Webbook
rinpol	660.00		NIST Webbook
rinpol	660.00		NIST Webbook
rinpol	660.00		NIST Webbook

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rinpol	661.00		NIST Webbook
rinpol	670.00		NIST Webbook
rinpol	669.00		NIST Webbook
rinpol	669.30		NIST Webbook
rinpol	661.50		NIST Webbook
rinpol	661.57		NIST Webbook
rinpol	662.00		NIST Webbook
rinpol	659.40		NIST Webbook
rinpol	660.00		NIST Webbook
rinpol	661.00		NIST Webbook
rinpol	671.00		NIST Webbook
rinpol	664.00		NIST Webbook
tb	363.28	K	Joback Method
tc	539.72	K	Joback Method
tf	148.81 ± 0.02	K	NIST Webbook
vc	0.402	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	180.16	J/molxK	363.28	Joback Method
cpg	235.39	J/molxK	510.31	Joback Method
cpg	225.33	J/molxK	480.91	Joback Method
cpg	214.79	J/molxK	451.50	Joback Method
cpg	203.76	J/molxK	422.09	Joback Method
cpg	192.22	J/molxK	392.69	Joback Method
cpg	245.01	J/molxK	539.72	Joback Method
dvisc	0.0001915	Paxs	363.28	Joback Method
dvisc	0.0002575	Paxs	327.50	Joback Method
dvisc	0.0003722	Paxs	291.71	Joback Method
dvisc	0.0005963	Paxs	255.92	Joback Method
dvisc	0.0011138	Paxs	220.14	Joback Method
dvisc	0.0026515	Paxs	184.35	Joback Method
dvisc	0.0095853	Paxs	148.57	Joback Method

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.39812e+01
Coeff. B	-2.90349e+03
Coeff. C	-5.11540e+01
Temperature range (K), min.	263.19
Temperature range (K), max.	386.05

## Sources

<b>KDB:</b>	<a href="https://www.thermo.com/research/kdb/hcprop/showprop.php?cmpid=228">https://www.thermo.com/research/kdb/hcprop/showprop.php?cmpid=228</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=C7385822&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C7385822&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>ie:</b>	Ionization energy
<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>rinpolar:</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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