

# 1-Hexene, 3,5-dimethyl-

<b>Other names:</b>	3,5-Dimethyl-1-hexene 3,5-Dimethylhex-1-ene
<b>Inchi:</b>	InChI=1S/C8H16/c1-5-8(4)6-7(2)3/h5,7-8H,1,6H2,2-4H3
<b>InchiKey:</b>	FEZKAPRRVNNJTK-UHFFFAOYSA-N
<b>Formula:</b>	C8H16
<b>SMILES:</b>	C=CC(C)CC(C)C
<b>Mol. weight [g/mol]:</b>	112.21
<b>CAS:</b>	7423-69-0

## Physical Properties

Property code	Value	Unit	Source
gf	99.44	kJ/mol	Joback Method
hf	-93.58	kJ/mol	Joback Method
hfus	8.15	kJ/mol	Joback Method
hvap	38.10	kJ/mol	NIST Webbook
log10ws	-2.54		Crippen Method
logp	2.855		Crippen Method
mcvol	119.280	ml/mol	McGowan Method
pc	2690.21	kPa	Joback Method
rinpola	699.50		NIST Webbook
rinpola	707.00		NIST Webbook
rinpola	700.00		NIST Webbook
rinpola	718.01		NIST Webbook
rinpola	707.00		NIST Webbook
rinpola	718.01		NIST Webbook
tb	378.24	K	Joback Method
tc	552.91	K	Joback Method
tf	148.16	K	Joback Method
vc	0.453	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	217.47	J/molxK	378.24	Joback Method

cpg	230.74	J/molxK	407.35	Joback Method
cpg	243.47	J/molxK	436.46	Joback Method
cpg	255.68	J/molxK	465.57	Joback Method
cpg	267.38	J/molxK	494.69	Joback Method
cpg	278.59	J/molxK	523.80	Joback Method
cpg	289.32	J/molxK	552.91	Joback Method
dvisc	0.0184203	Paxs	148.16	Joback Method
dvisc	0.0041486	Paxs	186.51	Joback Method
dvisc	0.0015535	Paxs	224.85	Joback Method
dvisc	0.0007745	Paxs	263.20	Joback Method
dvisc	0.0004609	Paxs	301.55	Joback Method
dvisc	0.0003084	Paxs	339.89	Joback Method
dvisc	0.0002238	Paxs	378.24	Joback Method

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.26083e+01
Coeff. B	-2.67112e+03
Coeff. C	-5.90470e+01
Temperature range (K), min.	275.85
Temperature range (K), max.	425.11

## Sources

**NIST Webbook:**

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C7423690&Units=SI>

**The Yaws Handbook of Vapor**

**Pressure:**

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

**Crippen Method:**

<http://pubs.acs.org/doi/abs/10.1021/ci990307l>

**Crippen Method:**

[https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

**Joback Method:**

[https://en.wikipedia.org/wiki/Joback\\_method](https://en.wikipedia.org/wiki/Joback_method)

**McGowan Method:**

<http://link.springer.com/article/10.1007/BF02311772>

## 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>rinpola:</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.cheméo.com/cid/19-135-1/1-Hexene-3-5-dimethyl.pdf>

Generated by Cheméo on 2024-04-18 02:38:47.198769536 +0000 UTC m=+15697176.119346849.

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