

# 9-Tricosene, (Z)-

<b>Other names:</b>	(9Z)-Tricosene (E)-9-tricosene (E)-tricos-9-ene (Z)-9-Tricosene Muscalure cis-9-Tricosene cis-tricos-9-ene musculare, (E)-9-tricosene
<b>Inchi:</b>	InChI=1S/C23H46/c1-3-5-7-9-11-13-15-17-19-21-23-22-20-18-16-14-12-10-8-6-4-2/h17,19,21,23
<b>InchiKey:</b>	IGOWHGRNPLFNDJ-ZPHPHTNESA-N
<b>Formula:</b>	C23H46
<b>SMILES:</b>	CCCCCCCCC=CCCCCCCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	322.61
<b>CAS:</b>	27519-02-4

## Physical Properties

Property code	Value	Unit	Source
gf	223.00	kJ/mol	Joback Method
hf	-400.83	kJ/mol	Joback Method
hfus	55.53	kJ/mol	Joback Method
hvap	66.75	kJ/mol	Joback Method
log10ws	-9.30		Crippen Method
logp	8.994		Crippen Method
mcvol	330.630	ml/mol	McGowan Method
pc	878.44	kPa	Joback Method
rinpol	374.50		NIST Webbook
rinpol	2298.00		NIST Webbook
rinpol	2281.00		NIST Webbook
rinpol	2271.00		NIST Webbook
rinpol	2272.92		NIST Webbook
rinpol	2273.00		NIST Webbook
rinpol	2271.00		NIST Webbook
rinpol	2275.00		NIST Webbook
rinpol	2274.00		NIST Webbook
rinpol	2299.00		NIST Webbook
rinpol	2272.00		NIST Webbook
ripol	2320.00		NIST Webbook

tb	573.20	K	NIST Webbook
tc	898.78	K	Joback Method
tf	343.89	K	Joback Method
vc	1.304	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1118.87	J/mol×K	898.78	Joback Method
cpg	1101.50	J/mol×K	870.62	Joback Method
cpg	1083.34	J/mol×K	842.45	Joback Method
cpg	1064.34	J/mol×K	814.29	Joback Method
cpg	1044.47	J/mol×K	786.13	Joback Method
cpg	1023.67	J/mol×K	757.96	Joback Method
cpg	1001.91	J/mol×K	729.80	Joback Method
dvisc	0.0024855	Paxs	343.89	Joback Method
dvisc	0.0000572	Paxs	729.80	Joback Method
dvisc	0.0000792	Paxs	665.48	Joback Method
dvisc	0.0001175	Paxs	601.16	Joback Method
dvisc	0.0001915	Paxs	536.85	Joback Method
dvisc	0.0003567	Paxs	472.53	Joback Method
dvisc	0.0008080	Paxs	408.21	Joback Method
hvapt	114.50	kJ/mol	298.15	Vaporization Enthalpies and Vapor Pressures of Two Insecticide Components, Muscalure and Empenthrin, by Correlation Gas Chromatography

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.33199e+01
Coeff. B	-4.63809e+03
Coeff. C	-1.11328e+02

Temperature range (K), min.	467.22
Temperature range (K), max.	690.48

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C27519024&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C27519024&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>Vaporization Enthalpies and Vapor Pressures of Two Insecticide Components, Muscalure and Empenthrin, by Correlation Gas Chromatography:</b>	<a href="https://www.doi.org/10.1021/je4008052">https://www.doi.org/10.1021/je4008052</a>
	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
	<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>hvapt:</b>	Enthalpy of vaporization at a given temperature
<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>ripola:</b>	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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