

# 2-docosene (Z)

Inchi:	InChI=1S/C22H44/c1-3-5-7-9-11-13-15-17-19-21-22-20-18-16-14-12-10-8-6-4-2/h3,5H,4
InchiKey:	AJNSXSUDSSWYSK-HYXAFXHYSA-N
Formula:	C22H44
SMILES:	CC=CCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]:	308.58

## Physical Properties

Property code	Value	Unit	Source
gf	214.58	kJ/mol	Joback Method
hf	-380.19	kJ/mol	Joback Method
hfus	52.94	kJ/mol	Joback Method
hvap	64.52	kJ/mol	Joback Method
log10ws	-8.89		Crippen Method
logp	8.604		Crippen Method
mcvol	316.540	ml/mol	McGowan Method
pc	930.64	kPa	Joback Method
rmpol	2223.00		NIST Webbook
tb	706.92	K	Joback Method
tc	873.81	K	Joback Method
tf	332.62	K	Joback Method
vc	1.248	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	940.23	J/molxK	706.92	Joback Method
cpg	961.55	J/molxK	734.73	Joback Method
cpg	981.95	J/molxK	762.55	Joback Method
cpg	1001.45	J/molxK	790.36	Joback Method
cpg	1020.10	J/molxK	818.18	Joback Method
cpg	1037.94	J/molxK	845.99	Joback Method
cpg	1055.00	J/molxK	873.81	Joback Method
dvisc	0.0027831	Paxs	332.62	Joback Method
dvisc	0.0009083	Paxs	395.00	Joback Method

dvisc	0.0004024	Paxs	457.39	Joback Method
dvisc	0.0002167	Paxs	519.77	Joback Method
dvisc	0.0001333	Paxs	582.15	Joback Method
dvisc	0.0000900	Paxs	644.54	Joback Method
dvisc	0.0000652	Paxs	706.92	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R205677&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R205677&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</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

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