

# 1-Tridecanamine, N-tridecyl-

<b>Other names:</b>	Bis(tridecyl)amine Di-n-tridecylamine Ditridecylamine N-tridecyltridecan-1-amine
<b>Inchi:</b>	InChI=1S/C26H55N/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-26-24-22-20-18-16-14-12-1
<b>InchiKey:</b>	PZFYOFFTIYJCEW-UHFFFAOYSA-N
<b>Formula:</b>	C26H55N
<b>SMILES:</b>	CCCCCCCCCCCCNCCCCCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	381.72
<b>CAS:</b>	5910-75-8

## Physical Properties

Property code	Value	Unit	Source
gf	257.43	kJ/mol	Joback Method
hf	-526.50	kJ/mol	Joback Method
hfus	68.20	kJ/mol	Joback Method
hvap	79.91	kJ/mol	Joback Method
log10ws	-9.90		Crippen Method
logp	9.198		Crippen Method
mcvol	387.180	ml/mol	McGowan Method
pc	730.07	kPa	Joback Method
tb	844.45	K	Joback Method
tc	1034.89	K	Joback Method
tf	326.65 ± 2.00	K	NIST Webbook
tf	329.65 ± 1.00	K	NIST Webbook
vc	1.526	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1291.03	J/molxK	844.45	Joback Method
cpg	1315.13	J/molxK	876.19	Joback Method
cpg	1337.96	J/molxK	907.93	Joback Method
cpg	1359.59	J/molxK	939.67	Joback Method

cpg	1380.07	J/mol×K	971.41	Joback Method
cpg	1399.46	J/mol×K	1003.15	Joback Method
cpg	1417.83	J/mol×K	1034.89	Joback Method

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.67534e+01
Coeff. B	-6.64753e+03
Coeff. C	-1.34402e+02
Temperature range (K), min.	538.12
Temperature range (K), max.	715.38

## 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=C5910758&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C5910758&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>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<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>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/72-186-6/1-Tridecanamine-N-tridecyl.pdf>

Generated by Cheméo on 2024-04-25 18:02:37.814290883 +0000 UTC m=+16357406.734868199.

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