

# 1-Tetradecanamine, N,N-dimethyl-

<b>Other names:</b>	Adma 14 Armeen DM 14D Armine DM14D Dimethyl myristamine Dimethyl-n-tetradecylamine Dimethylmyristylamine Dimethyltetradecylamine Genamin 14R302D IPL 30 Myristyl dimethyl amine N,N-Dimethyl-n-tetradecylamine N,N-Dimethylmyristylamine N,N-Dimethyltetradecanamine N,N-Dimethyltetradecylamine NSC 78319 Onamine 14 Tetradecylamine, N,N-dimethyl- Tetradecyldimethylamine myristyldimethylamine
<b>Inchi:</b>	InChI=1S/C16H35N/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17(2)3/h4-16H2,1-3H3
<b>InchiKey:</b>	SFBHPFQSSDCYSL-UHFFFAOYSA-N
<b>Formula:</b>	C16H35N
<b>SMILES:</b>	CCCCCCCCCCCN(C)C
<b>Mol. weight [g/mol]:</b>	241.46
<b>CAS:</b>	112-75-4

## Physical Properties

Property code	Value	Unit	Source
gf	194.62	kJ/mol	Joback Method
hf	-306.04	kJ/mol	Joback Method
hfus	40.22	kJ/mol	Joback Method
hvap	53.25	kJ/mol	Joback Method
log10ws	-5.09		Crippen Method
logp	5.249		Crippen Method
mcvol	246.280	ml/mol	McGowan Method
pc	1316.56	kPa	Joback Method
rinpol	1694.00		NIST Webbook

tb	577.92	K	Joback Method
tc	735.96	K	Joback Method
tf	302.00 ± 3.00	K	NIST Webbook
tf	273.15 ± 5.00	K	NIST Webbook
vc	0.950	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	651.37	J/mol×K	577.92	Joback Method
cpg	670.88	J/mol×K	604.26	Joback Method
cpg	689.61	J/mol×K	630.60	Joback Method
cpg	707.58	J/mol×K	656.94	Joback Method
cpg	724.81	J/mol×K	683.28	Joback Method
cpg	741.32	J/mol×K	709.62	Joback Method
cpg	757.14	J/mol×K	735.96	Joback Method
hvapt	77.30	kJ/mol	298.00	Evaluation of the Vaporization Enthalpies and Liquid Vapor Pressures of (R)-Deprenyl, (S)-Benzphetamine, Alverine, and a Series of Aliphatic Tertiary Amines by Correlation Gas Chromatography at T/K = 298.15

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.74330e+01
Coeff. B	-5.84793e+03
Coeff. C	-1.01042e+02
Temperature range (K), min.	442.12
Temperature range (K), max.	583.48

# 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>Evaluation of the Vaporization Enthalpies and Liquid Vapor Pressures of (R)- and (S)-Benzphetamine, Alverine, and a Series of Aliphatic Tertiary Amines by Correlation Gas Chromatography at T/K = 298.15: NIST Webbook.</b>	<a href="https://www.doi.org/10.1021/je500358r">https://www.doi.org/10.1021/je500358r</a>
<b>The Yaws Handbook of Vapor Pressure: Crippen Method:</b>	<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>
	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C112754&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C112754&amp;Units=SI</a>
	<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>
	<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>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>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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