

N-Nitrosodimethylamine

Other names:	(CH ₃) ₂ NNO DMN DMNA Dimethylamine, N-nitroso- Dimethylnitrosamin Dimethylnitrosamine Dimethylnitrosoamine Methanamine, N-methyl-N-nitroso- N,N-Dimethylnitrosamine N-Methyl-N-nitrosomethanamine N-Nitroso-N,N-Dimethylamine NDMA NSC 23226 Nitrosodimethylamine Rcra waste number P082
Inchi:	InChI=1S/C2H6N2O/c1-4(2)3-5/h1-2H3
InchiKey:	UMFJAHHVKNCGLG-UHFFFAOYSA-N
Formula:	C ₂ H ₆ N ₂ O
SMILES:	CN(C)N=O
Mol. weight [g/mol]:	74.08
CAS:	62-75-9

Physical Properties

Property code	Value	Unit	Source
chl	-1650.00	kJ/mol	NIST Webbook
hf	-185.27	kJ/mol	Joback Method
hvap	31.19	kJ/mol	Joback Method
ie	9.09	eV	NIST Webbook
ie	8.69	eV	NIST Webbook
ie	9.05	eV	NIST Webbook
log10ws	-0.41		Crippen Method
logp	0.229		Crippen Method
mcvol	60.570	ml/mol	McGowan Method
pc	4890.21	kPa	Joback Method
rinpol	708.00		NIST Webbook
rinpol	708.00		NIST Webbook
rinpol	708.00		NIST Webbook

tb	321.00	K	Joback Method
tc	487.31	K	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	426.20	K	103.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.53422e+01
Coeff. B	-4.35252e+03
Coeff. C	-2.01280e+01
Temperature range (K), min.	303.85
Temperature range (K), max.	454.05

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C62759&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/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

chl:	Standard liquid enthalpy of combustion
hf:	Enthalpy of formation at standard conditions

hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature

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