

N,N-Dimethylthioformamide

Other names:	Formamide, N,N-dimethylthio-Dimethylthioformamide N,N-Dimethylthioformamide HCSN(CH3)2 N,N-Dimethylmethanethioamide N,N-dimethylthioforamide
Inchi:	InChI=1S/C3H7NS/c1-4(2)3-5/h3H,1-2H3
InchiKey:	SKECXRFZFFAANN-UHFFFAOYSA-N
Formula:	C3H7NS
SMILES:	CN(C)C=S
Mol. weight [g/mol]:	89.16

Physical Properties

Property code	Value	Unit	Source
affp	906.40	kJ/mol	NIST Webbook
basg	875.50	kJ/mol	NIST Webbook
hfus	12.46	kJ/mol	Joback Method
ie	8.16	eV	NIST Webbook
ie	8.20	eV	NIST Webbook
ie	8.20	eV	NIST Webbook
logp	0.505		Crippen Method
mcvol	75.160	ml/mol	McGowan Method
ripol	1829.00		NIST Webbook
ripol	1829.00		NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	114.47	J/mol×K	350.64	Joback Method
cpg	122.44	J/mol×K	382.58	Joback Method
cpg	129.85	J/mol×K	414.53	Joback Method
cpg	136.75	J/mol×K	446.47	Joback Method
cpg	143.16	J/mol×K	478.42	Joback Method
cpg	149.12	J/mol×K	510.36	Joback Method

cpg

154.66

J/mol×K

542.31

Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	390.00 ± 1.00	K	3.60	NIST Webbook

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C758167&Units=SI>

Joback Method:

https://en.wikipedia.org/wiki/Joback_method

McGowan Method:

<http://link.springer.com/article/10.1007/BF02311772>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci990307l>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

Legend

affp:	Proton affinity
basg:	Gas basicity
cpg:	Ideal gas heat capacity
hfus:	Enthalpy of fusion at standard conditions
ie:	Ionization energy
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
ripol:	Polar retention indices
tbrp:	Boiling point at reduced pressure

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