Formamide, N-methyl-N-phenyl-

Other names:	Formanilide, N-methyl- Methylphenylformamide N-Formyl-N-methylaniline N-Methyl-N-formylaniline N-Methyl-N-phenylformamide N-Methylformanilide N-Phenyl-N-methylformamide NSC 3828
Inchi:	InChI=1S/C8H9NO/c1-9(7-10)8-5-3-2-4-6-8/h2-7H,1H3
InchiKey:	JIKUXBYRTXDNIY-UHFFFAOYSA-N
Formula:	C8H9NO
SMILES:	CN(C=O)c1ccccc1
Mol. weight [g/mol]:	135.16
CAS:	93-61-8

Physical Properties

Property code	Value	Unit	Source
gf	140.15	kJ/mol	Joback Method
hf	-75.60	kJ/mol	NIST Webbook
hfl	-145.90 ± 8.10	kJ/mol	NIST Webbook
hfus	15.83	kJ/mol	Joback Method
hvap	70.30 ± 1.80	kJ/mol	NIST Webbook
log10ws	-1.15		Crippen Method
logp	1.279		Crippen Method
mcvol	111.370	ml/mol	McGowan Method
pc	3990.60	kPa	Joback Method
ripol	2027.00		NIST Webbook
ripol	2027.00		NIST Webbook
tb	516.20	K	NIST Webbook
tc	683.04	K	Joback Method
tf	280.81	K	Joback Method
vc	0.410	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	224.60	J/mol×K	470.22	Joback Method
cpg	237.07	J/mol×K	505.69	Joback Method
cpg	248.73	J/mol×K	541.16	Joback Method
cpg	259.59	J/mol×K	576.63	Joback Method
cpg	269.70	J/mol×K	612.10	Joback Method
cpg	279.11	J/mol×K	647.57	Joback Method
cpg	287.84	J/mol×K	683.04	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	404.20	K	2.90	NIST Webbook

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C93618&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cpg: Ideal gas heat capacity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfl: Liquid phase enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hvap: Enthalpy of vaporization at standard conditions
log10ws: Log10 of Water solubility in mol/l

logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume