

Phenol, 3-(dimethylamino)-

Other names:	Phenol, m-(dimethylamino)- (3-Hydroxyphenyl)dimethylamine m-(Dimethylamino)phenol N,N-Dimethyl-m-aminophenol 3-(Dimethylamino)phenol 3-Hydroxy-N,N-dimethylaniline DAMP
Inchi:	InChI=1S/C8H11NO/c1-9(2)7-4-3-5-8(10)6-7/h3-6,10H,1-2H3
InchiKey:	MESJRHHDBDCQTH-UHFFFAOYSA-N
Formula:	C8H11NO
SMILES:	CN(C)c1cccc(O)c1
Mol. weight [g/mol]:	137.18
CAS:	99-07-0

Physical Properties

Property code	Value	Unit	Source
gf	85.05	kJ/mol	Joback Method
hf	-81.70	kJ/mol	Joback Method
hfus	19.32	kJ/mol	Joback Method
hvap	50.73	kJ/mol	Joback Method
log10ws	-0.93		Crippen Method
logp	1.458		Crippen Method
mcvol	115.670	ml/mol	McGowan Method
pc	4397.41	kPa	Joback Method
tb	539.70	K	NIST Webbook
tc	724.75	K	Joback Method
tf	350.53	K	Joback Method
vc	0.359	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	256.72	J/mol×K	502.18	Joback Method
cpg	269.56	J/mol×K	539.27	Joback Method

cpg	281.41	J/mol×K	576.37	Joback Method
cpg	292.36	J/mol×K	613.46	Joback Method
cpg	302.49	J/mol×K	650.56	Joback Method
cpg	311.90	J/mol×K	687.65	Joback Method
cpg	320.66	J/mol×K	724.75	Joback Method

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=C99070&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/34-983-3/Phenol-3-dimethylamino.pdf>

Generated by Cheméo on 2024-04-23 12:01:21.612213522 +0000 UTC m=+16162930.532790841.

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