

Benzene, 1-methoxy-2-methyl-3-nitro-

Other names:	Anisole, 2-methyl-3-nitro- 2-Methoxy-6-nitrotoluene 6-Methoxy-2-nitrotoluene 2-Methyl-3-nitroanisole Nitrobenzene, 3-methoxy-2-methyl-
Inchi:	InChI=1S/C8H9NO3/c1-6-7(9(10)11)4-3-5-8(6)12-2/h3-5H,1-2H3
InchiKey:	HQCZLEAGIOIIMC-UHFFFAOYSA-N
Formula:	C8H9NO3
SMILES:	COc1cccc([N+](=O)[O-])c1C
Mol. weight [g/mol]:	167.16
CAS:	4837-88-1

Physical Properties

Property code	Value	Unit	Source
gf	40.18	kJ/mol	Joback Method
hf	-137.84	kJ/mol	Joback Method
hfus	22.29	kJ/mol	Joback Method
hvap	56.00	kJ/mol	Joback Method
log10ws	-2.72		Crippen Method
logp	1.912		Crippen Method
mcvol	123.110	ml/mol	McGowan Method
pc	3501.28	kPa	Joback Method
tb	593.34	K	Joback Method
tc	835.30	K	Joback Method
tf	397.22	K	Joback Method
vc	0.475	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.57	J/molxK	593.34	Joback Method
cpg	298.32	J/molxK	633.67	Joback Method
cpg	309.33	J/molxK	673.99	Joback Method
cpg	319.61	J/molxK	714.32	Joback Method

cpg	329.15	J/mol×K	754.64	Joback Method
cpg	337.99	J/mol×K	794.97	Joback Method
cpg	346.11	J/mol×K	835.30	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4837881&Units=SI

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

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