Acetamide, N-(4-methoxyphenyl)-N-methyl-

Other names:	Acetaminophen di-methyl derivative
	N-(4-Methoxyphenyl)-N-methylacetamide
	Acetaminophen, bis-Me
	p-Methoxy-N-methylacetanilide
	p-Acetanisidide, N-methyl-
	Acetaminophen, bis-methyl-
	Acetaminophen Me
Inchi:	InChI=1S/C10H13NO2/c1-8(12)11(2)9-4-6-10(13-3)7-5-9/h4-7H,1-3H3
InchiKey:	BZSWWJLVPTULPS-UHFFFAOYSA-N
Formula:	C10H13NO2
SMILES:	COc1ccc(N(C)C(C)=O)cc1
Mol. weight [g/mol]:	179.22
CAS:	35813-38-8

Physical Properties

Property code	Value	Unit	Source
gf	12.96	kJ/mol	Joback Method
hf	-201.94	kJ/mol	Joback Method
hfus	21.12	kJ/mol	Joback Method
hvap	51.99	kJ/mol	Joback Method
log10ws	-1.69		Crippen Method
logp	1.678		Crippen Method
mcvol	145.420	ml/mol	McGowan Method
pc	3025.61	kPa	Joback Method
rinpol	1512.00		NIST Webbook
rinpol	1512.00		NIST Webbook
tb	548.59	K	Joback Method
tc	759.30	K	Joback Method
tf	346.03	K	Joback Method
vc	0.529	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	334.56	J/mol×K	548.59	Joback Method
cpg	348.54	J/mol×K	583.71	Joback Method
cpg	361.71	J/mol×K	618.83	Joback Method
cpg	374.11	J/mol×K	653.94	Joback Method
cpg	385.75	J/mol×K	689.06	Joback Method
cpg	396.66	J/mol×K	724.18	Joback Method
cpg	406.85	J/mol×K	759.30	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C35813388&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume