

# Methyl 4-methylphenylsulfoxide

<b>Other names:</b>	Methyl p-methylphenylsulfoxide 1-Methanesulfinyl-4-methylbenzene
<b>Inchi:</b>	InChI=1S/C8H10OS/c1-7-3-5-8(6-4-7)10(2)9/h3-6H,1-2H3
<b>InchiKey:</b>	FEVALTJSQBFLEU-UHFFFAOYSA-N
<b>Formula:</b>	C8H10OS
<b>SMILES:</b>	Cc1ccc(S(C)=O)cc1
<b>Mol. weight [g/mol]:</b>	154.23
<b>CAS:</b>	934-72-5

## Physical Properties

Property code	Value	Unit	Source
gf	-98.45	kJ/mol	Joback Method
hf	-189.13	kJ/mol	Joback Method
hfus	17.88	kJ/mol	Joback Method
hvap	49.07	kJ/mol	Joback Method
ie	8.70	eV	NIST Webbook
log10ws	-1.44		Crippen Method
logp	1.732		Crippen Method
mcvol	122.040	ml/mol	McGowan Method
pc	3985.56	kPa	Joback Method
tb	472.38	K	Joback Method
tc	692.30	K	Joback Method
tf	255.34	K	Joback Method
vc	0.466	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	236.62	J/molxK	472.38	Joback Method
cpg	249.49	J/molxK	509.03	Joback Method
cpg	261.65	J/molxK	545.69	Joback Method
cpg	273.12	J/molxK	582.34	Joback Method
cpg	283.90	J/molxK	618.99	Joback Method
cpg	294.02	J/molxK	655.64	Joback Method

## Sources

<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C934725&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C934725&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>ie:</b>	Ionization energy
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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