

# 4,4'-Ditolyl sulfoxide

<b>Other names:</b>	Di-p-tolyl sulfoxide p-Tolyl sulfoxide Benzene, 1,1'-sulfinylbis[4-methyl- p-Toluene, 1,1'-sulfinylbis- Ditolyl sulfoxide Sulfoxide, ditolyl Toluene, 4,4'-sulfinylbis- Ditolyl sulphoxide Bis(p-methylphenyl) sulfoxide NSC 73128 bis(p-tolyl)sulphoxide
<b>Inchi:</b>	InChI=1S/C14H14OS/c1-11-3-7-13(8-4-11)16(15)14-9-5-12(2)6-10-14/h3-10H,1-2H3
<b>InchiKey:</b>	MJWNJEJCQHNDNM-UHFFFAOYSA-N
<b>Formula:</b>	C14H14OS
<b>SMILES:</b>	<chem>Cc1ccc(S(=O)c2ccc(C)cc2)cc1</chem>
<b>Mol. weight [g/mol]:</b>	230.32
<b>CAS:</b>	1774-35-2

## Physical Properties

Property code	Value	Unit	Source
gf	54.85	kJ/mol	Joback Method
hf	-87.91	kJ/mol	Joback Method
hfus	27.07	kJ/mol	Joback Method
hvap	65.36	kJ/mol	Joback Method
log10ws	-3.59		Crippen Method
logp	3.470		Crippen Method
mcvol	182.820	ml/mol	McGowan Method
pc	2940.89	kPa	Joback Method
tb	641.32	K	Joback Method
tc	886.29	K	Joback Method
tf	361.90	K	Joback Method
vc	0.694	m3/kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	441.36	J/mol×K	641.32	Joback Method
cpg	457.92	J/mol×K	682.15	Joback Method
cpg	473.19	J/mol×K	722.98	Joback Method
cpg	487.23	J/mol×K	763.81	Joback Method
cpg	500.07	J/mol×K	804.64	Joback Method
cpg	511.76	J/mol×K	845.46	Joback Method
cpg	522.34	J/mol×K	886.29	Joback Method

## Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.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>
<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=C1774352&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1774352&amp;Units=SI</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>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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