

# Allylphenyl sulfone

<b>Other names:</b>	Benzene, (2-propenylsulfonyl)- Sulfone, allyl phenyl Phenyl allyl sulfone (allylsulphonyl)benzene
<b>Inchi:</b>	InChI=1S/C9H10O2S/c1-2-8-12(10,11)9-6-4-3-5-7-9/h2-7H,1,8H2
<b>InchiKey:</b>	KYPIULIVYSQNNT-UHFFFAOYSA-N
<b>Formula:</b>	C9H10O2S
<b>SMILES:</b>	<chem>C=CCS(=O)(=O)c1ccccc1</chem>
<b>Mol. weight [g/mol]:</b>	182.24
<b>CAS:</b>	16212-05-8

## Physical Properties

Property code	Value	Unit	Source
gf	-243.39	kJ/mol	Joback Method
hf	-320.48	kJ/mol	Joback Method
hfus	23.20	kJ/mol	Joback Method
hvap	55.87	kJ/mol	Joback Method
log10ws	-1.86		Crippen Method
logp	1.646		Crippen Method
mcvol	137.700	ml/mol	McGowan Method
pc	4140.93	kPa	Joback Method
tb	476.46	K	Joback Method
tc	681.88	K	Joback Method
tf	254.41	K	Joback Method
vc	0.538	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	274.16	J/molxK	476.46	Joback Method
cpg	287.87	J/molxK	510.70	Joback Method
cpg	300.78	J/molxK	544.93	Joback Method
cpg	312.91	J/molxK	579.17	Joback Method
cpg	324.29	J/molxK	613.41	Joback Method

cpg	334.93	J/mol×K	647.64	Joback Method
cpg	344.85	J/mol×K	681.88	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=C16212058&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C16212058&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>hvac:</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>mccol:</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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