

# 1-Naphthalenesulfonyl chlorine

<b>Other names:</b>	1-Naphthalenesulfonyl chloride «alpha»-Naphthalenesulfonyl chloride «alpha»-Naphthalenesulfochloride 1-Naphthylsulfonyl chloride naphthalene-1-sulphonyl chloride
<b>Inchi:</b>	InChI=1S/C10H7ClO2S/c11-14(12,13)10-7-3-5-8-4-1-2-6-9(8)10/h1-7H
<b>InchiKey:</b>	DASJFYAPNPUBGG-UHFFFAOYSA-N
<b>Formula:</b>	C10H7ClO2S
<b>SMILES:</b>	O=S(=O)(Cl)c1cccc2ccccc12
<b>Mol. weight [g/mol]:</b>	226.68
<b>CAS:</b>	85-46-1

## Physical Properties

Property code	Value	Unit	Source
gf	-237.72	kJ/mol	Joback Method
hf	-302.69	kJ/mol	Joback Method
hfus	27.90	kJ/mol	Joback Method
hvap	65.45	kJ/mol	Joback Method
log10ws	-3.69		Crippen Method
logp	2.767		Crippen Method
mccvol	148.870	ml/mol	McGowan Method
pc	4450.38	kPa	Joback Method
tb	564.05	K	Joback Method
tc	797.68	K	Joback Method
tf	342.58	K	Joback Method
vc	0.585	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	310.56	J/mol×K	564.05	Joback Method
cpg	322.96	J/mol×K	602.99	Joback Method
cpg	334.35	J/mol×K	641.93	Joback Method
cpg	344.78	J/mol×K	680.87	Joback Method

cpg	354.30	J/mol×K	719.80	Joback Method
cpg	362.97	J/mol×K	758.74	Joback Method
cpg	370.82	J/mol×K	797.68	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C85461&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C85461&amp;Units=SI</a>
<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>

## 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>hvp:</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

Latest version available from:

<https://www.chemeo.com/cid/42-424-4/1-Naphthalenesulfonyl-chlorine.pdf>

Generated by Cheméo on 2024-04-18 05:50:11.256711246 +0000 UTC m=+15708660.177288568.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.