

2-Naphthalenesulfonyl chloride

Other names:	«beta»-Naphthalenesulfochloride «beta»-Naphthalenesulfonyl chloride Naphthalene-2-sulfonic acid chloride Naphthalene-2-sulfonyl chloride 2-Naphthylsulfonyl chloride beta-Naphthalenesulfonyl chloride «beta»-Naphthylsulfonyl chloride 2-Naphthalenylsulfonyl chloride NSC 133893 naphthalene-2-sulphonyl chloride
Inchi:	InChI=1S/C10H7ClO2S/c11-14(12,13)10-6-5-8-3-1-2-4-9(8)7-10/h1-7H
InchiKey:	OPECTNGATDYLSS-UHFFFAOYSA-N
Formula:	C10H7ClO2S
SMILES:	O=S(=O)(Cl)c1ccc2ccccc2c1
Mol. weight [g/mol]:	226.68
CAS:	93-11-8

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
mcvol	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 ³ /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

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C93118&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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