

# 3,3'-Bithiophene

<b>Other names:</b>	3,3'-Dithienyl 3,3'-bithienyl
<b>Inchi:</b>	InChI=1S/C8H6S2/c1-3-9-5-7(1)8-2-4-10-6-8/h1-6H
<b>InchiKey:</b>	IAAQEGBHNXAHBF-UHFFFAOYSA-N
<b>Formula:</b>	C8H6S2
<b>SMILES:</b>	c1cc(-c2ccsc2)cs1
<b>Mol. weight [g/mol]:</b>	166.26
<b>CAS:</b>	3172-56-3

## Physical Properties

Property code	Value	Unit	Source
hsub	89.20 ± 0.30	kJ/mol	NIST Webbook
ie	8.20	eV	NIST Webbook
ie	7.99	eV	NIST Webbook
ie	7.99	eV	NIST Webbook
log10ws	-3.59		Crippen Method
logp	3.477		Crippen Method
mvol	117.360	ml/mol	McGowan Method
tf	406.20	K	Phase transition equilibrium of terthiophene isomers

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	88.60 ± 0.30	kJ/mol	309.00	NIST Webbook

## Sources

<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Phase transition equilibrium of terthiophene isomers:</b>	<a href="https://www.doi.org/10.1016/j.jct.2010.08.007">https://www.doi.org/10.1016/j.jct.2010.08.007</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>

**NIST Webbook:**

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C3172563&Units=SI>

**Crippen Method:**

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

## Legend

<b>hsub:</b>	Enthalpy of sublimation at standard conditions
<b>hsubt:</b>	Enthalpy of sublimation at a given temperature
<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>tf:</b>	Normal melting (fusion) point

Latest version available from:

<https://www.cheméo.com/cid/17-135-3/3-3-Bithiophene.pdf>

Generated by Cheméo on 2024-04-25 15:10:37.404429943 +0000 UTC m=+16347086.325007259.

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