# 2-Propenyl 2,3-bis-(methylthio)propyl ether

**Inchi:** InChI=1S/C8H16OS2/c1-4-5-9-6-8(11-3)7-10-2/h4,8H,1,5-7H2,2-3H3
**InchiKey:** XVCHWYZDFBUKMR-UHFFFAOYSA-N
**Formula:** C8H16OS2
**SMILES:** C=CCOCC(CSC)SC
**Mol. weight [g/mol]:** 192.34

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 63.12 | kJ/mol | Joback Method |
| hf | -136.78 | kJ/mol | Joback Method |
| hfus | 21.12 | kJ/mol | Joback Method |
| hvap | 48.39 | kJ/mol | Joback Method |
| log10ws | -1.99 | | Crippen Method |
| logp | 2.284 | | Crippen Method |
| mcvol | 157.850 | ml/mol | McGowan Method |
| pc | 2715.50 | kPa | Joback Method |
| rinpol | 1380.00 | | NIST Webbook |
| rinpol | 1380.00 | | NIST Webbook |
| tb | 538.66 | K | Joback Method |
| tc | 751.59 | K | Joback Method |
| tf | 254.19 | K | Joback Method |
| vc | 0.585 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 346.58 | J/mol×K | 538.66 | Joback Method |
| cpg | 360.53 | J/mol×K | 574.15 | Joback Method |
| cpg | 373.82 | J/mol×K | 609.64 | Joback Method |
| cpg | 386.44 | J/mol×K | 645.12 | Joback Method |
| cpg | 398.40 | J/mol×K | 680.61 | Joback Method |
| cpg | 409.70 | J/mol×K | 716.10 | Joback Method |
| cpg | 420.32 | J/mol×K | 751.59 | 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=R121658&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# 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 |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |