# 6-Ethyl-4,5,7,8-tetrathia-cis-2-undecene

**Inchi:** InChI=1S/C9H18S4/c1-4-7-10-12-9(6-3)13-11-8-5-2/h4,7,9H,5-6,8H2,1-3H3/b7-4+
**InchiKey:** MMZWJALGNZCSLI-QPJJXVBHSA-N
**Formula:** C9H18S4
**SMILES:** CC=CSSC(CC)SSCCC
**Mol. weight [g/mol]:** 254.50
**CAS:** 126876-36-6

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 235.16 | kJ/mol | Joback Method |
| hf | 50.33 | kJ/mol | Joback Method |
| hfus | 32.26 | kJ/mol | Joback Method |
| hvap | 62.47 | kJ/mol | Joback Method |
| log10ws | -6.06 | | Crippen Method |
| logp | 5.429 | | Crippen Method |
| mcvol | 198.770 | ml/mol | McGowan Method |
| pc | 2619.09 | kPa | Joback Method |
| rinpol | 1784.00 | | NIST Webbook |
| rinpol | 1813.10 | | NIST Webbook |
| rinpol | 1755.90 | | NIST Webbook |
| rinpol | 1755.90 | | NIST Webbook |
| tb | 684.16 | K | Joback Method |
| tc | 936.50 | K | Joback Method |
| tf | 308.71 | K | Joback Method |
| vc | 0.730 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 474.10 | J/mol×K | 684.16 | Joback Method |
| cpg | 489.15 | J/mol×K | 726.22 | Joback Method |
| cpg | 503.06 | J/mol×K | 768.27 | Joback Method |
| cpg | 515.85 | J/mol×K | 810.33 | Joback Method |
| cpg | 527.53 | J/mol×K | 852.39 | Joback Method |

| | | | | |
|---|---|---|---|---|
| cpg | 538.11 | J/mol×K | 894.45 | Joback Method |
| cpg | 547.62 | J/mol×K | 936.50 | 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=C126876366&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 |