# 10H-Phenothiazine, 2-(ethylthio)-

**Other names:** 2-(Ethylthio)phenothiazine
Thiethylperazine M (ring)
**Inchi:** InChI=1S/C14H13NS2/c1-2-16-10-7-8-14-12(9-10)15-11-5-3-4-6-13(11)17-14/h3-9,15H,2
**InchiKey:** DMHPUUIDINBWBN-UHFFFAOYSA-N
**Formula:** C14H13NS2
**SMILES:** CCSc1ccc2c(c1)Nc1ccccc1S2
**Mol. weight [g/mol]:** 259.39
**CAS:** 46815-10-5

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 504.18 | kJ/mol | Joback Method |
| hf | 330.60 | kJ/mol | Joback Method |
| hfus | 35.47 | kJ/mol | Joback Method |
| hvap | 72.73 | kJ/mol | Joback Method |
| log10ws | -5.10 | | Crippen Method |
| logp | 5.007 | | Crippen Method |
| mcvol | 192.420 | ml/mol | McGowan Method |
| pc | 3188.33 | kPa | Joback Method |
| rinpol | 2750.00 | | NIST Webbook |
| tb | 760.32 | K | Joback Method |
| tc | 1040.84 | K | Joback Method |
| tf | 586.52 | K | Joback Method |
| vc | 0.707 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 488.99 | J/mol×K | 760.32 | Joback Method |
| cpg | 503.13 | J/mol×K | 807.07 | Joback Method |
| cpg | 516.12 | J/mol×K | 853.83 | Joback Method |
| cpg | 528.09 | J/mol×K | 900.58 | Joback Method |
| cpg | 539.21 | J/mol×K | 947.33 | Joback Method |
| cpg | 549.60 | J/mol×K | 994.09 | Joback Method |

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|---|---|---|---|---|
| cpg | 559.42 | J/mol×K | 1040.84 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C46815105&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |

# Legend

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|---|---|
| **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 |