# 5-hydroxy-1,2-dithiacyclooctane

**Other names:** 1,2-Dithiacyclooctane, 5-hydroxy
**Inchi:** InChI=1S/C6H12OS2/c7-6-2-1-4-8-9-5-3-6/h6-7H,1-5H2
**InchiKey:** FGYSGNWYOAYLOE-UHFFFAOYSA-N
**Formula:** C6H12OS2
**SMILES:** OC1CCCSSCC1
**Mol. weight [g/mol]:** 164.29

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -57.21 | kJ/mol | Joback Method |
| hf | -186.88 | kJ/mol | Joback Method |
| hfus | 10.33 | kJ/mol | Joback Method |
| hvap | 58.03 | kJ/mol | Joback Method |
| log10ws | -2.36 | | Crippen Method |
| logp | 1.913 | | Crippen Method |
| mcvol | 123.110 | ml/mol | McGowan Method |
| pc | 4697.74 | kPa | Joback Method |
| rinpol | 1221.00 | | NIST Webbook |
| tb | 552.61 | K | Joback Method |
| tc | 789.93 | K | Joback Method |
| tf | 385.44 | K | Joback Method |
| vc | 0.400 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 275.99 | J/mol×K | 552.61 | Joback Method |
| cpg | 290.46 | J/mol×K | 592.16 | Joback Method |
| cpg | 304.01 | J/mol×K | 631.72 | Joback Method |
| cpg | 316.66 | J/mol×K | 671.27 | Joback Method |
| cpg | 328.43 | J/mol×K | 710.82 | Joback Method |
| cpg | 339.33 | J/mol×K | 750.38 | Joback Method |
| cpg | 349.36 | J/mol×K | 789.93 | Joback Method |

# Sources

| | |
|---|---|
| **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 |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=R82334&Units=SI |

# 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 |

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