

# 2,4-dimethyl-3,5-dithiahexane

|                      |   |
|----------------------|---|
| Inchi:               | InChI=1S/C6H14S2/c1-5(2)8-6(3)7-4/h5-6H,1-4H3 |
| InchiKey:            | XKBOUYAAHFKBPJ-UHFFFAOYSA-N                   |
| Formula:             | C6H14S2                                       |
| SMILES:              | CSC(C)SC(C)C                                  |
| Mol. weight [g/mol]: | 150.31  |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | 61.00   | kJ/mol               | Joback Method  |
| hf            | -93.99  | kJ/mol               | Joback Method  |
| hfus          | 12.51   | kJ/mol               | Joback Method  |
| hvap          | 41.81   | kJ/mol               | Joback Method  |
| log10ws       | -2.82   |                      | Crippen Method |
| logp          | 2.837   |                      | Crippen Method |
| mcvol         | 128.100 | ml/mol               | McGowan Method |
| pc            | 3287.81 | kPa                  | Joback Method  |
| rinpol        | 1055.00 |                      | NIST Webbook   |
| rinpol        | 1055.00 |                      | NIST Webbook   |
| tb            | 473.36  | K                    | Joback Method  |
| tc            | 695.84  | K                    | Joback Method  |
| tf            | 196.18  | K                    | Joback Method  |
| vc            | 0.468   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 254.40 | J/mol×K | 473.36          | Joback Method |
| cpg           | 267.47 | J/mol×K | 510.44          | Joback Method |
| cpg           | 279.93 | J/mol×K | 547.52          | Joback Method |
| cpg           | 291.77 | J/mol×K | 584.60          | Joback Method |
| cpg           | 303.01 | J/mol×K | 621.68          | Joback Method |
| cpg           | 313.64 | J/mol×K | 658.76          | Joback Method |
| cpg           | 323.66 | J/mol×K | 695.84          | Joback Method |

# Sources

|                        |   |
|------------------------|---|
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R155636&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R155636&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>                         |
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                     |

# Legend

|                  |   |
|------------------|---|
| <b>cpg:</b>      | Ideal gas heat capacity                         |
| <b>gf:</b>       | Standard Gibbs free energy of formation         |
| <b>hf:</b>       | Enthalpy of formation at standard conditions    |
| <b>hfus:</b>     | Enthalpy of fusion at standard conditions       |
| <b>h vap:</b>    | Enthalpy of vaporization at standard conditions |
| <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>pc:</b>       | Critical Pressure                               |
| <b>r in pol:</b> | Non-polar retention indices                     |
| <b>tb:</b>       | Normal Boiling Point Temperature                |
| <b>tc:</b>       | Critical Temperature                            |
| <b>tf:</b>       | Normal melting (fusion) point                   |
| <b>vc:</b>       | Critical Volume                                 |

Latest version available from:

<https://www.cheméo.com/cid/81-088-5/2-4-dimethyl-3-5-dithiahexane.pdf>

Generated by Cheméo on 2024-04-26 17:11:52.416778079 +0000 UTC m=+16440761.337355401.

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