# Methanesulfonamide, iodo-

**Inchi:** InChI=1S/CH4INO2S/c2-1-6(3,4)5/h1H2,(H2,3,4,5)
**InchiKey:** FDGDRDDFTVNCGU-UHFFFAOYSA-N
**Formula:** CH4INO2S
**SMILES:** NS(=O)(=O)CI
**Mol. weight [g/mol]:** 221.02
**CAS:** 22354-13-8

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -386.43 | kJ/mol | Joback Method |
| hf | -406.66 | kJ/mol | Joback Method |
| hfus | 19.33 | kJ/mol | Joback Method |
| hvap | 56.47 | kJ/mol | Joback Method |
| log10ws | -0.94 | | Crippen Method |
| logp | -0.333 | | Crippen Method |
| mcvol | 88.840 | ml/mol | McGowan Method |
| pc | 7915.30 | kPa | Joback Method |
| tb | 435.73 | K | Joback Method |
| tc | 657.07 | K | Joback Method |
| tf | 280.91 | K | Joback Method |
| vc | 0.335 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 137.04 | J/mol×K | 435.73 | Joback Method |
| cpg | 142.38 | J/mol×K | 472.62 | Joback Method |
| cpg | 147.42 | J/mol×K | 509.51 | Joback Method |
| cpg | 152.17 | J/mol×K | 546.40 | Joback Method |
| cpg | 156.62 | J/mol×K | 583.29 | Joback Method |
| cpg | 160.78 | J/mol×K | 620.18 | Joback Method |
| cpg | 164.63 | J/mol×K | 657.07 | 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=C22354138&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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |