# Benzene, (2-iodoethenyl)-

**Other names:** (2-iodoethenyl)benzene
**Inchi:** InChI=1S/C8H7I/c9-7-6-8-4-2-1-3-5-8/h1-7H/b7-6+
**InchiKey:** OZPOYKXYJOHGCW-VOTSOKGWSA-N
**Formula:** C8H7I
**SMILES:** IC=Cc1ccccc1
**Mol. weight [g/mol]:** 230.05
**CAS:** 101349-79-5

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 267.23 | kJ/mol | Joback Method |
| hf | 222.17 | kJ/mol | Joback Method |
| hfus | 15.13 | kJ/mol | Joback Method |
| hvap | 45.01 | kJ/mol | Joback Method |
| log10ws | -3.74 | | Crippen Method |
| logp | 3.092 | | Crippen Method |
| mcvol | 121.340 | ml/mol | McGowan Method |
| pc | 3786.98 | kPa | Joback Method |
| tb | 506.42 | K | Joback Method |
| tc | 766.03 | K | Joback Method |
| tf | 259.32 | K | Joback Method |
| vc | 0.444 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 205.63 | J/mol×K | 506.42 | Joback Method |
| cpg | 217.17 | J/mol×K | 549.69 | Joback Method |
| cpg | 227.65 | J/mol×K | 592.96 | Joback Method |
| cpg | 237.16 | J/mol×K | 636.22 | Joback Method |
| cpg | 245.81 | J/mol×K | 679.49 | Joback Method |
| cpg | 253.68 | J/mol×K | 722.76 | Joback Method |
| cpg | 260.87 | J/mol×K | 766.03 | Joback Method |
| dvisc | 0.0038491 | Pa×s | 259.32 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0018089 | Pa×s | 300.50 | Joback Method |
| dvisc | 0.0010198 | Pa×s | 341.69 | Joback Method |
| dvisc | 0.0006504 | Pa×s | 382.87 | Joback Method |
| dvisc | 0.0004527 | Pa×s | 424.05 | Joback Method |
| dvisc | 0.0003359 | Pa×s | 465.24 | Joback Method |
| dvisc | 0.0002617 | Pa×s | 506.42 | Joback Method |

# Sources

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|---|---|
| **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=C101349795&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# Legend

| | |
|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **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 |