

# 1-Iodo-3,4-methylenedioxybenzene

|                      |                                                      |
|----------------------|------------------------------------------------------|
| Inchi:               | InChI=1S/C7H5IO2/c8-5-1-2-6-7(3-5)10-4-9-6/h1-3H,4H2 |
| InchiKey:            | NMMCBIXYIYQHCP-UHFFFAOYSA-N                          |
| Formula:             | C7H5IO2                                              |
| SMILES:              | Ic1ccc2c(c1)OCO2                                     |
| Mol. weight [g/mol]: | 248.02                                               |
| CAS:                 | 5876-51-7                                            |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | 55.55   | kJ/mol  | Joback Method  |
| hf            | -68.21  | kJ/mol  | Joback Method  |
| hfus          | 24.58   | kJ/mol  | Joback Method  |
| hvap          | 53.39   | kJ/mol  | Joback Method  |
| log10ws       | -2.83   |         | Crippen Method |
| logp          | 2.020   |         | Crippen Method |
| mcvol         | 112.430 | ml/mol  | McGowan Method |
| pc            | 4652.99 | kPa     | Joback Method  |
| tb            | 554.65  | K       | Joback Method  |
| tc            | 823.57  | K       | Joback Method  |
| tf            | 353.49  | K       | Joback Method  |
| vc            | 0.407   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 213.55    | J/mol×K | 554.65          | Joback Method |
| cpg           | 251.59    | J/mol×K | 778.75          | Joback Method |
| cpg           | 245.39    | J/mol×K | 733.93          | Joback Method |
| cpg           | 238.59    | J/mol×K | 689.11          | Joback Method |
| cpg           | 231.08    | J/mol×K | 644.29          | Joback Method |
| cpg           | 222.78    | J/mol×K | 599.47          | Joback Method |
| cpg           | 257.31    | J/mol×K | 823.57          | Joback Method |
| dvisc         | 0.0006189 | Pa×s    | 554.65          | Joback Method |
| dvisc         | 0.0007315 | Pa×s    | 521.12          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0008847 | Pa×s | 487.60 | Joback Method |
| dvisc | 0.0011006 | Pa×s | 454.07 | Joback Method |
| dvisc | 0.0014175 | Pa×s | 420.54 | Joback Method |
| dvisc | 0.0019076 | Pa×s | 387.02 | Joback Method |
| dvisc | 0.0027158 | Pa×s | 353.49 | Joback Method |

## Sources

|                        |                                                                                                                                             |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.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>                                       |
| <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=C5876517&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C5876517&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                   |

## Legend

|                 |                                                 |
|-----------------|-------------------------------------------------|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>dvisc:</b>   | Dynamic viscosity                               |
| <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>hvap:</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>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |
| <b>vc:</b>      | Critical Volume                                 |

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