# propane, 2,2-diiodo-

**Inchi:** InChI=1S/C3H6I2/c1-3(2,4)5/h1-2H3
**InchiKey:** AZUCPFMKPGFGTB-UHFFFAOYSA-N
**Formula:** C3H6I2
**SMILES:** CC(C)(I)I
**Mol. weight [g/mol]:** 295.89
**CAS:** 630-13-7

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 93.46 | kJ/mol | Joback Method |
| hf | 39.74 | kJ/mol | Joback Method |
| hfus | 4.92 | kJ/mol | Joback Method |
| hvap | 39.72 | kJ/mol | Joback Method |
| log10ws | -3.58 | | Crippen Method |
| logp | 2.593 | | Crippen Method |
| mcvol | 104.770 | ml/mol | McGowan Method |
| pc | 4266.28 | kPa | Joback Method |
| tb | 451.09 | K | Joback Method |
| tc | 717.78 | K | Joback Method |
| tf | 242.11 | K | Joback Method |
| vc | 0.368 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 141.02 | J/mol×K | 451.09 | Joback Method |
| cpg | 148.24 | J/mol×K | 495.54 | Joback Method |
| cpg | 154.62 | J/mol×K | 539.99 | Joback Method |
| cpg | 160.26 | J/mol×K | 584.44 | Joback Method |
| cpg | 165.24 | J/mol×K | 628.88 | Joback Method |
| cpg | 169.67 | J/mol×K | 673.33 | Joback Method |
| cpg | 173.63 | J/mol×K | 717.78 | Joback Method |
| dvisc | 0.0089822 | Pa×s | 242.11 | Joback Method |
| dvisc | 0.0040271 | Pa×s | 276.94 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0021599 | Pa×s | 311.77 | Joback Method |
| dvisc | 0.0013130 | Pa×s | 346.60 | Joback Method |
| dvisc | 0.0008741 | Pa×s | 381.43 | Joback Method |
| dvisc | 0.0006229 | Pa×s | 416.26 | Joback Method |
| dvisc | 0.0004678 | Pa×s | 451.09 | 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=C630137&Units=SI

# 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