# 3,7-Dimethylocta-1,5-dien-3,7-diol (Terpenediol I)

**Inchi:** InChI=1S/C10H18O2/c1-5-10(4,12)8-6-7-9(2,3)11/h5-7,11-12H,1,8H2,2-4H3/b7-6+
**InchiKey:** QEOHJVNDENHRCH-VOTSOKGWSA-N
**Formula:** C10H18O2
**SMILES:** C=CC(C)(O)CC=CC(C)(C)O
**Mol. weight [g/mol]:** 170.25

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -66.58 | kJ/mol | Joback Method |
| hf | -329.04 | kJ/mol | Joback Method |
| hfus | 13.93 | kJ/mol | Joback Method |
| hvap | 67.91 | kJ/mol | Joback Method |
| log10ws | -2.47 | | Crippen Method |
| logp | 1.641 | | Crippen Method |
| mcvol | 154.900 | ml/mol | McGowan Method |
| pc | 2884.30 | kPa | Joback Method |
| rinpol | 1191.00 | | NIST Webbook |
| rinpol | 1191.00 | | NIST Webbook |
| tb | 606.94 | K | Joback Method |
| tc | 785.35 | K | Joback Method |
| tf | 322.10 | K | Joback Method |
| vc | 0.573 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 406.39 | J/mol×K | 606.94 | Joback Method |
| cpg | 417.71 | J/mol×K | 636.67 | Joback Method |
| cpg | 428.34 | J/mol×K | 666.41 | Joback Method |
| cpg | 438.34 | J/mol×K | 696.14 | Joback Method |
| cpg | 447.75 | J/mol×K | 725.88 | Joback Method |
| cpg | 456.64 | J/mol×K | 755.61 | Joback Method |
| cpg | 465.04 | J/mol×K | 785.35 | Joback Method |
| dvisc | 0.0332491 | Pa×s | 322.10 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0043787 | Pa×s | 369.57 | Joback Method |
| dvisc | 0.0009149 | Pa×s | 417.05 | Joback Method |
| dvisc | 0.0002632 | Pa×s | 464.52 | Joback Method |
| dvisc | 0.0000954 | Pa×s | 511.99 | Joback Method |
| dvisc | 0.0000411 | Pa×s | 559.47 | Joback Method |
| dvisc | 0.0000202 | Pa×s | 606.94 | Joback Method |

# Sources

**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=R614818&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
**rinpol:** Non-polar retention indices
**tb:** Normal Boiling Point Temperature
**tc:** Critical Temperature
**tf:** Normal melting (fusion) point
**vc:** Critical Volume