# 4-OCTENE-2,7-DIOL, 2,7-DIMETHYL-, Z-

**Other names:** cis-2,7-Dimethyl-4-octene-2,7-diol
**Inchi:** InChI=1S/C10H20O2/c1-9(2,11)7-5-6-8-10(3,4)12/h5-6,11-12H,7-8H2,1-4H3/b6-5+
**InchiKey:** LQBJEGDVJSXOJN-WAYWQWQTSA-N
**Formula:** C10H20O2
**SMILES:** CC(C)(O)C/C=C\CC(C)(C)O
**Mol. weight [g/mol]:** 172.27

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| hf | -542.37 | kJ/mol | Cheméo Relay (1.0) |
| hfus | 15.21 | kJ/mol | Joback Method |
| hvap | 86.94 | kJ/mol | Cheméo Relay (1.0) |
| ie | 9.14 | eV | Cheméo Relay (1.0) |
| log10ws | -1.34 | | Cheméo Relay (1.0) |
| logp | 1.865 | | Crippen Method |
| mcvol | 159.200 | ml/mol | McGowan Method |
| pc | 2758.46 | kPa | Joback Method |
| tb | 505.76 | K | Cheméo Relay (1.0) |
| tc | 682.61 | K | Cheméo Relay (1.0) |
| tf | 300.01 | K | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 427.47 | J/mol×K | 610.26 | Joback Method |
| cpg | 439.38 | J/mol×K | 639.54 | Joback Method |
| cpg | 450.60 | J/mol×K | 668.83 | Joback Method |
| cpg | 461.19 | J/mol×K | 698.11 | Joback Method |
| cpg | 471.19 | J/mol×K | 727.40 | Joback Method |
| cpg | 480.66 | J/mol×K | 756.68 | Joback Method |
| cpg | 489.64 | J/mol×K | 785.97 | Joback Method |
| dvisc | 0.0329250 | Pa×s | 323.86 | Joback Method |
| dvisc | 0.0042721 | Pa×s | 371.59 | Joback Method |
| dvisc | 0.0008824 | Pa×s | 419.33 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0002516 | Pa×s | 467.06 | Joback Method |
| dvisc | 0.0000905 | Pa×s | 514.79 | Joback Method |
| dvisc | 0.0000387 | Pa×s | 562.53 | Joback Method |
| dvisc | 0.0000189 | Pa×s | 610.26 | Joback Method |

# Sources

| | |
|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Cheméo Relay (1.0):** | |
| **Cheméo Relay (1.0, beta):** | |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U151608&Units=SI |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |

# Legend

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **ie:** | Ionization energy |
| **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 |