# (1R,7S,E)-7-Isopropyl-4,10-dimethylenecyclodec-5

**Inchi:** InChI=1S/C15H24O/c1-11(2)14-8-5-12(3)6-10-15(16)13(4)7-9-14/h5,8,11,14-16H,3-4,6-7
**InchiKey:** OSSWBZXPRYZGRO-VMPITWQZSA-N
**Formula:** C15H24O
**SMILES:** C=C1C=CC(C(C)C)CCC(=C)C(O)CC1
**Mol. weight [g/mol]:** 220.35
**CAS:** 81968-62-9

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 40.62 | kJ/mol | Joback Method |
| hf | -274.84 | kJ/mol | Joback Method |
| hfus | 18.58 | kJ/mol | Joback Method |
| hvap | 66.69 | kJ/mol | Joback Method |
| log10ws | -4.45 | | Crippen Method |
| logp | 3.862 | | Crippen Method |
| mcvol | 204.320 | ml/mol | McGowan Method |
| pc | 2043.76 | kPa | Joback Method |
| rinpol | 1694.50 | | NIST Webbook |
| tb | 663.78 | K | Joback Method |
| tc | 869.88 | K | Joback Method |
| tf | 321.81 | K | Joback Method |
| vc | 0.743 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 573.91 | J/mol×K | 663.78 | Joback Method |
| cpg | 660.89 | J/mol×K | 835.53 | Joback Method |
| cpg | 645.87 | J/mol×K | 801.18 | Joback Method |
| cpg | 629.66 | J/mol×K | 766.83 | Joback Method |
| cpg | 612.26 | J/mol×K | 732.48 | Joback Method |
| cpg | 593.68 | J/mol×K | 698.13 | Joback Method |
| cpg | 674.71 | J/mol×K | 869.88 | Joback Method |
| dvisc | 0.0000220 | Pa×s | 663.78 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0000378 | Pa×s | 606.78 | Joback Method |
| dvisc | 0.0000724 | Pa×s | 549.79 | Joback Method |
| dvisc | 0.0001614 | Pa×s | 492.79 | Joback Method |
| dvisc | 0.0004435 | Pa×s | 435.80 | Joback Method |
| dvisc | 0.0016523 | Pa×s | 378.81 | Joback Method |
| dvisc | 0.0098098 | Pa×s | 321.81 | 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=C81968629&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
**rinpol:** Non-polar retention indices
**tb:** Normal Boiling Point Temperature
**tc:** Critical Temperature
**tf:** Normal melting (fusion) point
**vc:** Critical Volume