# 2H-1-Benzopyran, 3,4-dihydro-2-phenyl-

**Other names:** Flavan
2-Phenylchroman
3,4-Dihydro-2-phenyl-2H-1-benzopyran
**Inchi:** InChI=1S/C15H14O/c1-2-6-12(7-3-1)15-11-10-13-8-4-5-9-14(13)16-15/h1-9,15H,10-11H
**InchiKey:** QOLIPNRNLBQTAU-UHFFFAOYSA-N
**Formula:** C15H14O
**SMILES:** c1ccc(C2CCc3ccccc3O2)cc1
**Mol. weight [g/mol]:** 210.27
**CAS:** 494-12-2

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 253.14 | kJ/mol | Joback Method |
| hf | 43.30 | kJ/mol | Joback Method |
| hfus | 26.31 | kJ/mol | Joback Method |
| hvap | 58.79 | kJ/mol | Joback Method |
| log10ws | -4.36 | | Crippen Method |
| logp | 3.753 | | Crippen Method |
| mcvol | 169.700 | ml/mol | McGowan Method |
| pc | 2875.03 | kPa | Joback Method |
| tb | 638.90 | K | Joback Method |
| tc | 897.38 | K | Joback Method |
| tf | 365.16 | K | Joback Method |
| vc | 0.629 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 439.61 | J/mol×K | 638.90 | Joback Method |
| cpg | 517.78 | J/mol×K | 854.30 | Joback Method |
| cpg | 504.83 | J/mol×K | 811.22 | Joback Method |
| cpg | 490.66 | J/mol×K | 768.14 | Joback Method |
| cpg | 475.15 | J/mol×K | 725.06 | Joback Method |
| cpg | 458.17 | J/mol×K | 681.98 | Joback Method |

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|---|---|---|---|---|
| cpg | 529.63 | J/mol×K | 897.38 | Joback Method |
| dvisc | 0.0002943 | Pa×s | 638.90 | Joback Method |
| dvisc | 0.0003595 | Pa×s | 593.28 | Joback Method |
| dvisc | 0.0004540 | Pa×s | 547.65 | Joback Method |
| dvisc | 0.0005983 | Pa×s | 502.03 | Joback Method |
| dvisc | 0.0008332 | Pa×s | 456.41 | Joback Method |
| dvisc | 0.0012487 | Pa×s | 410.78 | Joback Method |
| dvisc | 0.0020706 | Pa×s | 365.16 | 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=C494122&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