# 11-Methylbenzo(a)fluorene

**Other names:** Benzo[a]fluorene, 11-methyl
**Inchi:** InChI=1S/C18H14/c1-12-14-7-4-5-9-16(14)17-11-10-13-6-2-3-8-15(13)18(12)17/h2-12H,
**InchiKey:** WQPWQWSJGFCJBF-UHFFFAOYSA-N
**Formula:** C18H14
**SMILES:** CC1c2ccccc2-c2ccc3ccccc3c21
**Mol. weight [g/mol]:** 230.30
**CAS:** 71265-25-3

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 488.21 | kJ/mol | Joback Method |
| hf | 299.99 | kJ/mol | Joback Method |
| hfus | 28.64 | kJ/mol | Joback Method |
| hvap | 63.41 | kJ/mol | Joback Method |
| log10ws | -6.61 | | Crippen Method |
| logp | 4.972 | | Crippen Method |
| mcvol | 186.640 | ml/mol | McGowan Method |
| pc | 2490.03 | kPa | Joback Method |
| rinpol | 367.04 | | NIST Webbook |
| rinpol | 367.04 | | NIST Webbook |
| tb | 696.72 | K | Joback Method |
| tc | 949.69 | K | Joback Method |
| tf | 440.70 | K | Joback Method |
| vc | 0.723 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 492.99 | J/mol×K | 696.72 | Joback Method |
| cpg | 508.78 | J/mol×K | 738.88 | Joback Method |
| cpg | 523.37 | J/mol×K | 781.04 | Joback Method |
| cpg | 536.96 | J/mol×K | 823.20 | Joback Method |
| cpg | 549.72 | J/mol×K | 865.36 | Joback Method |
| cpg | 561.86 | J/mol×K | 907.53 | Joback Method |

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|---|---|---|---|---|
| cpg | 573.55 | J/mol×K | 949.69 | Joback Method |
| dvisc | 0.0019507 | Pa×s | 440.70 | Joback Method |
| dvisc | 0.0017029 | Pa×s | 483.37 | Joback Method |
| dvisc | 0.0015197 | Pa×s | 526.04 | Joback Method |
| dvisc | 0.0013796 | Pa×s | 568.71 | Joback Method |
| dvisc | 0.0012694 | Pa×s | 611.38 | Joback Method |
| dvisc | 0.0011808 | Pa×s | 654.05 | Joback Method |
| dvisc | 0.0011081 | Pa×s | 696.72 | Joback Method |

# Sources

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|---|---|
| **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=C71265253&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# 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 |

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