# 9,10-Anthracenedione, 1,4-bis[(4-methylphenyl)amino]-

**Other names:**

Ahcoquinone Cyanine Green Base
Alizarine Cyanine Green Base
Alizarine Cyanine Green G Fat Soluble
Alizarine Green G Base
Amaplast Green OZ
Anthraquinone Green G Base
Anthraquinone, 1,4-bis(p-tolylamino)-
Anthraquinone, 1,4-di-p-toluidino-
Arlosol Green B
Arlosol Green BS
Arlosol Green BSS
Bis-1,4-p-tolylaminoanthrchinon
C.I. Solvent Green 3
C.I. 61565
C-Green 10
Cyanine Green G base
D and C Green No. 6
D&C Green 6
Fat Soluble Anthraquinone Green
Fat Soluble Green Anthraquinone
Green No. 202
Macro-lex Green 5B
Nitro Fast Green GB
Organol Fast Green J
Organol Green J
Quinazarin green
Quinizarin Green SS
Quinizarine Green Base
Solvent Green 3
Sudan Green 4B
Toyo Oriental Oil Blue G
Waxoline Green 6GFW
Waxoline Green G
1,4-Bis(p-toluidino)anthraquinone
1,4-Bis(p-tolylamine)anthraquinone
1,4-Di-(4'-toluidino)anthraquinone
1,4-Di-p-toluidinoanthraquinone
11091 Green
Anthraquinone, 1,4-(4,4'-ditoluidino)-
Anthraquinone, 1,4-bis(4'-toluidino)-

| | |
|---|---|
| | D&C Green No 6 |
| | NSC 84207 |
| | Anthraquinone, 1,4-bis(4,4'-ditoluidino)- |
| | 1,4-bis(p-tolylamino)anthraquinone |
| **Inchi:** | InChI=1S/C28H22N2O2/c1-17-7-11-19(12-8-17)29-23-15-16-24(30-20-13-9-18(2)10-14-2 |
| **InchiKey:** | TVRGPOFMYCMNRB-UHFFFAOYSA-N |
| **Formula:** | C28H22N2O2 |
| **SMILES:** | Cc1ccc(Nc2ccc(Nc3ccc(C)cc3)c3c2C(=O)c2ccccc2C3=O)cc1 |
| **Mol. weight [g/mol]:** | 418.49 |
| **CAS:** | 128-80-3 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 590.90 | kJ/mol | Joback Method |
| hf | 186.89 | kJ/mol | Joback Method |
| hfus | 50.49 | kJ/mol | Joback Method |
| hvap | 112.41 | kJ/mol | Joback Method |
| log10ws | -8.20 | | Crippen Method |
| logp | 6.566 | | Crippen Method |
| mcvol | 322.580 | ml/mol | McGowan Method |
| pc | 1682.41 | kPa | Joback Method |
| tb | 1219.76 | K | Joback Method |
| tc | 1505.33 | K | Joback Method |
| tf | 853.58 | K | Joback Method |
| vc | 1.222 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1075.51 | J/mol×K | 1219.76 | Joback Method |
| cpg | 1084.04 | J/mol×K | 1267.36 | Joback Method |
| cpg | 1091.25 | J/mol×K | 1314.95 | Joback Method |
| cpg | 1097.30 | J/mol×K | 1362.55 | Joback Method |
| cpg | 1102.33 | J/mol×K | 1410.14 | Joback Method |
| cpg | 1106.49 | J/mol×K | 1457.74 | Joback Method |
| cpg | 1109.92 | J/mol×K | 1505.33 | Joback Method |

# Sources

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|---|---|
| **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=C128803&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# Legend

| | |
|---|---|
| **cpg:** | Ideal gas heat capacity |
| **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 |