# Imipramine

**Other names:**

1-(3-Dimethylaminopropyl)-4,5-dihydro-2,3,6,7-dibenzazepine
10,11-Dihydro-5-(3-(dimethylamino)propyl)-5H-dibenz[b,f]azepine
2,2'-(3-Dimethylaminopropylimino)bibenzyl
2,2'-(3-Dimethylaminopropylimino)dibenzyl
3-(5,6-dihydrobenzo[b][1]benzazepin-11-yl)-N,N-dimethylpropan-1-amine
5,6-Dihydro-N-(3-(dimethylamino)propyl)-11H-dibenz(b,e)azepine
5-(3-(Dimethylamino)propyl)-10,11-dihydro-5H-dibenz(b,f)azepine
5-(3-Dimethylaminopropyl)-10,11-dihydro-5H-dibenzo(b,f)azepine
5H-Dibenz(b,f)azepine, 10,11-dihydro-5-(3-(dimethylamino)propyl)-
5H-Dibenz[b,f]azepine, 5-[3-(dimethylamino)propyl]-10,11-dihydro-
5H-Dibenz[b,f]azepine-5-propanamine, 10,11-dihydro-N,N-dimethyl-
Antideprin
Berkomine
Censtim
Censtin
DPID
Declomipramine
Dimipressin
Dyna-Zina
Dynaprin
Imidobenzyle
Imipramina
Imiprin
Impramine
Intalpram
Iramil
Irmin
Melipramin
Melipramine
N-(3-Dimethylaminopropyl)-o-iminodibenzyl
N-(«gamma»-Dimethylaminopropyl)iminodibenzyl
N-(Â«gammaÂ»-Dimethylaminopropyl)iminodibenzyl
NSC 169866
Nelipramin
Prazepine
Promiben
Timolet
Tofranil (free base)
Tofranil, base

**Inchi:**

InChI=1S/C19H24N2/c1-20(2)14-7-15-21-18-10-5-3-8-16(18)12-13-17-9-4-6-11-19(17)21

**InchiKey:** BCGWQEUPMDMJNV-UHFFFAOYSA-N
**Formula:** C19H24N2
**SMILES:** CN(C)CCCN1c2ccccc2CCc2ccccc21
**Mol. weight [g/mol]:** 280.41
**CAS:** 50-49-7

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| ie | 8.03 | eV | NIST Webbook |
| ie | 7.35 ± 0.05 | eV | NIST Webbook |
| ie | 8.21 ± 0.07 | eV | NIST Webbook |
| log10ws | -4.19 | | Aqueous Solubility Prediction Method |
| log10ws | -4.11 | | Aqueous Solubility Prediction Method |
| logp | 3.875 | | Crippen Method |
| mcvol | 240.150 | ml/mol | McGowan Method |
| rinpol | 2226.00 | | NIST Webbook |
| rinpol | 2282.30 | | NIST Webbook |
| rinpol | 2205.00 | | NIST Webbook |
| rinpol | 2219.00 | | NIST Webbook |
| rinpol | 2218.00 | | NIST Webbook |
| rinpol | 2220.00 | | NIST Webbook |
| rinpol | 2220.00 | | NIST Webbook |
| rinpol | 2220.00 | | NIST Webbook |
| rinpol | 2222.00 | | NIST Webbook |
| rinpol | 2225.00 | | NIST Webbook |
| rinpol | 2225.00 | | NIST Webbook |
| rinpol | 2225.00 | | NIST Webbook |
| rinpol | 2225.00 | | NIST Webbook |
| rinpol | 2228.00 | | NIST Webbook |
| rinpol | 2228.00 | | NIST Webbook |
| rinpol | 2230.00 | | NIST Webbook |
| rinpol | 2220.00 | | NIST Webbook |
| rinpol | 2220.00 | | NIST Webbook |
| rinpol | 2222.00 | | NIST Webbook |
| rinpol | 2223.00 | | NIST Webbook |
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|---|---|---|---|
| rinpol | 2225.00 | | NIST Webbook |
| rinpol | 2233.00 | | NIST Webbook |
| rinpol | 2230.00 | | NIST Webbook |
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| rinpol | 2240.00 | | NIST Webbook |
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| rinpol | 2212.00 | | NIST Webbook |
| rinpol | 2240.00 | | NIST Webbook |
| rinpol | 2222.00 | | NIST Webbook |
| rinpol | 2210.00 | | NIST Webbook |
| rinpol | 2262.00 | | NIST Webbook |
| rinpol | 2212.00 | | NIST Webbook |
| rinpol | 2262.00 | | NIST Webbook |
| rinpol | 2220.00 | | NIST Webbook |
| tf | 447.65 | K | Aqueous Solubility Prediction Method |
| tf | 447.65 | K | Aqueous Solubility Prediction Method |

# Sources

| | |
|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C50497&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Aqueous Solubility Prediction Method:** | http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa |
| **Aqueous Solubility Prediction Method:** | http://onschallenge.wikispaces.com/file/view/AqueousDataset003.xlsx/351830174/AqueousDa |

# Legend

| | |
|---|---|
| **ie:** | Ionization energy |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **rinpol:** | Non-polar retention indices |
| **tf:** | Normal melting (fusion) point |