

Phenytoin di-methyl derivative

Other names:

Hydantoin, 1,3-dimethyl-5,5-diphenyl-
N,N'-Dimethyldiphenylhydantoin
1,3-Dimethyl-5,5-diphenylhydantoin
Dimethyl derivative of phenytoin
1,3-Dimethyl derivative of 5,5-Diphenylhydantoin
Phenytoin di-methyl derivative
1,3-Dimethyl-5,5-diphenyl-2,4-imidazolidinedione
Phenytoin di-Me
Phenytoin, methylated
Phenytoin permethylated
Phenytoin Me

Inchi:

InChI=1S/C17H16N2O2/c1-18-15(20)17(19(2)16(18)21,13-9-5-3-6-10-13)14-11-7-4-8-12

InchiKey:

AQYFZMVWUJJKL-UHFFFAOYSA-N

Formula:

C17H16N2O2

SMILES:

CN1C(=O)N(C)C(c2ccccc2)(c2ccccc2)C1=O

Mol. weight [g/mol]:

280.33

Physical Properties

Property code	Value	Unit	Source
log10ws	-3.76		Cheméo Relay (1.0)
logp	2.454		Crippen Method
mcvol	215.110	ml/mol	McGowan Method
rinpol	2213.00		NIST Webbook
rinpol	2264.00		NIST Webbook
rinpol	2169.00		NIST Webbook
rinpol	2169.00		NIST Webbook
rinpol	2213.00		NIST Webbook
rinpol	2264.00		NIST Webbook

Sources

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C6456015&Units=SI>

McGowan Method:

<http://link.springer.com/article/10.1007/BF02311772>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci990307l>

Crippen Method:

https://www.cheméo.com/doc/models/crippen_log10ws

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

Legend

log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
rinpol:	Non-polar retention indices

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