Lucirin TPO solid (2,4,6-trimethylbenzoyldiphenyl phosphine oxide)

Other names: (2,4,6-trimethylbenzoyl) diphenylphosphine oxide
Lucirin TPO
diphenyl (2,4,6-trimethylbenzoyl)phosphine oxide

Inchi: InChI=1S/C22H21O2P/c1-16-14-17(2)21(18(3)15-16)22(23)25(24,19-10-6-4-7-11-19)20-

InchiKey: VFHVQBAGLAREND-UHFFFAOYSA-N

Formula: C22H21O2P

SMILES: Cc1cc(C)c(C(=O)P(=O)(c2ccccc2)c2ccccc2)c(C)c1

Mol. weight [g/mol]: 348.37

Physical Properties

Property code	Value	Unit	Source
log10ws	-15.93		Crippen Method
logp	4.766		Crippen Method
mcvol	277.460	ml/mol	McGowan Method
rinpol	2819.00		NIST Webbook
tf	365.81	K	Solubility and mixing thermodynamic properties of (2,4,6-trimethylbenzoyl) diphenylphosphine oxide in pure and binary solvents

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R508515&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Solubility and mixing thermodynamic properties of (2,4,6-trimethylbenzoyl) diphenylphosphine oxide in pure and binary solvents: https://www.doi.org/10.1016/j.fluid.2018.01.015

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Legend

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