4-n-Pentanoyl-4-n'-propanoyloxyazobenzene

Inchi: InChI=1S/C20H22N2O3/c1-3-5-6-19(23)15-7-9-16(10-8-15)21-22-17-11-13-18(14-12-17)
InchiKey: IPNQZEASJULUSD-QURGRASLSA-N
Formula: C20H22N2O3
SMILES: CCCCC(=O)c1ccc(N=Nc2ccc(OC(=O)CC)cc2)cc1
Mol. weight [g/mol]: 338.40
CAS: 120102-97-8

Physical Properties

Property code	Value	Unit	Source
hf	-316.17	kJ/mol	Joback Method
hvap	88.56	kJ/mol	Joback Method
log10ws	-6.16		Crippen Method
logp	5.790		Crippen Method
mcvol	269.810	ml/mol	McGowan Method
pc	1414.37	kPa	Joback Method
tb	999.68	K	Joback Method
tc	1243.01	K	Joback Method

Sources

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=C120102978&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

hf: Enthalpy of formation 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