

4-Propionyl-4'-n-nonanoyloxyazobenzene

Inchi:	InChI=1S/C24H30N2O3/c1-3-5-6-7-8-9-10-24(28)29-22-17-15-21(16-18-22)26-25-20-13
InchiKey:	RAQPCULHOLNQBD-OCEACIFDSA-N
Formula:	C24H30N2O3
SMILES:	CCCCCCCCC(=O)Oc1ccc(N=Nc2ccc(C(=O)CC)cc2)cc1
Mol. weight [g/mol]:	394.51
CAS:	76204-63-2

Physical Properties

Property code	Value	Unit	Source
hf	-398.73	kJ/mol	Joback Method
hvap	97.47	kJ/mol	Joback Method
log10ws	-7.83		Crippen Method
logp	7.351		Crippen Method
mcvol	326.170	ml/mol	McGowan Method
pc	1079.93	kPa	Joback Method
tb	1091.20	K	Joback Method
tc	1338.12	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	3.02	kJ/mol	367.15	NIST Webbook
sfust	8.22	J/mol×K	367.15	NIST Webbook

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=C76204632&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
hfust:	Enthalpy of fusion at a given temperature
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
sfust:	Entropy of fusion at a given temperature
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

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