2-Propenal, 3-phenyl-, (2,4-dinitrophenyl)hydrazone

Other names: Cinnamaldehyde, (2,4-dinitrophenyl)hydrazone
Inchi: InChI=1S/C15H12N4O4/c20-18(21)13-8-9-14(15(11-13)19(22)23)17-16-10-4-7-12-5-2-1-
InchiKey: RLSRMSQNTNYDMC-JEVKGGJXSA-N
Formula: C15H12N4O4
SMILES: O=[N+]([O-])c1ccc(NN=CC=Cc2ccccc2)c([N+](=O)[O-])c1
Mol. weight [g/mol]: 312.28
CAS: 1237-69-0

Physical Properties

Property code	Value	Unit	Source
hf	328.58	kJ/mol	Joback Method
hvap	97.75	kJ/mol	Joback Method
log10ws	-5.41		Crippen Method
logp	3.614		Crippen Method
mcvol	220.890	ml/mol	McGowan Method
pc	2398.22	kPa	Joback Method
tb	1040.61	K	Joback Method
tc	1325.77	K	Joback Method

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
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=C1237690&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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