

trans-2-Butenal 2,4-dinitrophenylhydrazone

Other names:	(2E)-2-Butenal (2,4-dinitrophenyl)hydrazone (2E)-Crotonaldehyde 2,4-dinitrophenylhydrazone Crotonaldehyde 2,4-dinitrophenylhydrazone
Inchi:	InChI=1S/C10H10N4O4/c1-2-3-6-11-12-9-5-4-8(13(15)16)7-10(9)14(17)18/h2-7,12H,1H3
InchiKey:	GFUVNGJSSAEZHW-KXKHHGOOISA-N
Formula:	C10H10N4O4
SMILES:	CC=CC=NNc1ccc([N+](=O)[O-])cc1[N+](=O)[O-]
Mol. weight [g/mol]:	250.21
CAS:	18318-80-4

Physical Properties

Property code	Value	Unit	Source
hf	195.25	kJ/mol	Joback Method
hvap	84.34	kJ/mol	Joback Method
log10ws	-4.05		Crippen Method
logp	2.477		Crippen Method
mcvol	174.200	ml/mol	McGowan Method
pc	2790.61	kPa	Joback Method
tb	899.53	K	Joback Method
tc	1170.51	K	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C18318804&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

hf:	Enthalpy of formation at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

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