2,3-Dimethyl-2,3-bis[(E)phenylazo]butane

Inchi: InChI=1S/C18H22N4/c1-17(2,21-19-15-11-7-5-8-12-15)18(3,4)22-20-16-13-9-6-10-14-16
InchiKey: RNFPCGNDACOHHM-OLAQIDGISA-N
Formula: C18H22N4
SMILES: CC(C)(N=Nc1ccccc1)C(C)(C)N=Nc1ccccc1
Mol. weight [g/mol]: 294.39
CAS: 133930-64-0

Physical Properties

Property code	Value	Unit	Source
chs	-10589.90 ± 2.00	kJ/mol	NIST Webbook
hf	477.00 ± 3.00	kJ/mol	NIST Webbook
hfs	362.60 ± 2.00	kJ/mol	NIST Webbook
hsub	114.40	kJ/mol	NIST Webbook
hvap	70.96	kJ/mol	Joback Method
log10ws	-5.51		Crippen Method
logp	6.111		Crippen Method
mcvol	248.280	ml/mol	McGowan Method
pc	1303.29	kPa	Joback Method
tb	956.54	K	Joback Method
tc	1231.44	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	21.09	kJ/mol	342.30	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=C133930640&Units=SI

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

Legend

chs:	Standard solid enthalpy of combustion
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase enthalpy of formation at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hsub:	Enthalpy of sublimation 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