P-phenylazobenzene sulfonic acid

Other names: azobenzene-4-sulphonic acid
Inchi: InChI=1S/C12H10N2O3S/c15-18(16,17)12-8-6-11(7-9-12)14-13-10-4-2-1-3-5-10/h1-9H,(
InchiKey: AJMNDPOSKIBVGX-BUHFOSPRSA-N
Formula: C12H10N2O3S
SMILES: O=S(=O)(O)c1ccc(N=Nc2ccccc2)cc1
Mol. weight [g/mol]: 262.28
CAS: 2484-88-0

Physical Properties

Property code	Value	Unit	Source
hf	-387.78	kJ/mol	Joback Method
hvap	89.50	kJ/mol	Joback Method
log10ws	-3.10		Crippen Method
logp	3.349		Crippen Method
mcvol	182.040	ml/mol	McGowan Method
pc	3310.55	kPa	Joback Method
tb	821.46	K	Joback Method
tc	1057.59	K	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C2484880&Units=SI

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