1,3-Benzenediamine, 4-(phenylazo)-

Other names:	m-Phenylenediamine, 4-(phenylazo)-
	Azohel
	C.I. Solvent Orange 3
	Chrysoidine (free base)
	Chrysoidine Base
	Chrysoidine Base A
	Chrysoidine Base B
	Chrysoidine G Base
	Chrysoidine J Base
	Chrysoidine Y Base
	Chrysoidine Y Base New
	Chrysoidine YD Base
	Fat Brown GG
	Grasan Chrysoidine
	Waxoline Orange Y
	2,4-Diaminoazobenzen
	4-(Phenylazo)-1,3-phenylenediamine
	Azobenzene-2,4-diamine
	Chrysoidin A
	C.I. 11270:1
	2,4-Diaminoazobenzene
	Oranz rozpoustedlova 3
	1,3-Benzenediamine, 4-(2-phenyldiazenyl)-
	Solvent Orange 3
	NSC 3273
	4-(phenylazo)benzene-1,3-diamine
Inchi:	InChI=1S/C12H12N4/c13-9-6-7-12(11(14)8-9)16-15-10-4-2-1-3-5-10/h1-8H,13-14H2
InchiKey:	IWRVPXDHSLTIOC-UHFFFAOYSA-N
Formula:	C12H12N4
SMILES:	Nc1ccc(N=Nc2ccccc2)c(N)c1
Mol. weight [g/mol]:	212.25
CAS:	495-54-5

Physical Properties

Property code	Value	Unit	Source
chs	-6717.40	kJ/mol	NIST Webbook

hf	273.91	kJ/mol	Joback Method
hfs	280.00	kJ/mol	NIST Webbook
hvap	76.13	kJ/mol	Joback Method
log10ws	-2.78		Crippen Method
logp	3.266		Crippen Method
mcvol	168.040	ml/mol	McGowan Method
pc	2811.36	kPa	Joback Method
tb	831.54	K	Joback Method
tc	1109.97	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	306.70	J/mol×K	323.00	NIST Webbook

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=C495545&Units=SI

Legend

chs: Standard solid enthalpy of combustion
cps: Solid phase heat capacity
hf: Enthalpy of formation at standard conditions
hfs: Solid phase 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