1,4-Benzenediamine, N-(1-methylethyl)-N'-phenyl-

Other names:

p-Phenylenediamine, N-isopropyl-N'-phenyl-
Antioxidant IP
Antioxidant 40NA
Antioxidant 4010 NA
ASM 4010MA
Cyzone IP
Diafen FP
Diaphen FP
Elastozone 34
Flexzone 3C
Ipognox 44
N-Phenyl-N'-isopropyl-1,4-phenylenediamine
Nocrack 810NA
Nonox ZA
Orflex PP
Ozonon 3C
Permanax 115
S-IP
Santoflex IP
Santoflex 36
4-(Isopropylamino)diphenylamine
4-Anilino-N-isopropylaniline
4010 NA
N-Isopropyl-N'-phenyl-p-phenylenediamine
Antigen 3C
Antigene 3C
Cyzone
N-Isopropyl-N'-fenyl-p-fenylendiamin
N-Phenyl-N'-isopropyl-p-phenylenediamine
N-2-Propyl-N'-phenyl-p-phenylenediamine
NCI-C56304
N-Fenyl-N'-isopropyl-p-fenylendiamin
N-Isopropyl-N-phenyl-p-phenylenediamine
Akrochem antioxidant pd1
Anto H
Dusantox IPPD
Flexone 3C
IPPD
N-Fenyl-N'-isopropyl-p-fenylendiamin (czech)
N-Isopropyl-N'-fenyl-p-fenylendiamin(Czech)

	N-Isopropyl-N'-phenyl-4-phenylenediamine
	Permanax IPPD
	Permanex IPPD
	Santoflex IPPD
	Vanox 3C
	Vulkanox 4010NA
	1,4-Benzenediamine, N1-(1-methylethyl)-N4-phenyl-
	N-(1-Methylethyl)-N'-phenyl-1,4-benzenediamine
	NA 4010
	NSC 41029
	Nocrac 810NA
Inchi:	InChI=1S/C15H18N2/c1-12(2)16-14-8-10-15(11-9-14)17-13-6-4-3-5-7-13/h3-12,16-17H,1
InchiKey:	OUBMGJOQLXMSNT-UHFFFAOYSA-N
Formula:	C15H18N2
SMILES:	CC(C)Nc1ccc(Nc2ccccc2)cc1
Mol. weight [g/mol]:	226.32
CAS:	101-72-4

Physical Properties

Property code	Value	Unit	Source
gf	466.95	kJ/mol	Joback Method
hf	210.32	kJ/mol	Joback Method
hfus	28.97	kJ/mol	Joback Method
hvap	66.68	kJ/mol	Joback Method
log10ws	-4.24		Crippen Method
logp	4.250		Crippen Method
mcvol	194.650	ml/mol	McGowan Method
pc	2558.51	kPa	Joback Method
tb	700.84	K	Joback Method
tc	936.88	K	Joback Method
tf	414.49	K	Joback Method
vc	0.724	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	529.17	J/mol×K	700.84	Joback Method

cpg	545.83	J/mol×K	740.18	Joback Method
cpg	561.21	J/mol×K	779.52	Joback Method
cpg	575.39	J/mol×K	818.86	Joback Method
cpg	588.45	J/mol×K	858.20	Joback Method
cpg	600.46	J/mol×K	897.54	Joback Method
cpg	611.51	J/mol×K	936.88	Joback Method
hsubt	120.70	kJ/mol	335.50	NIST Webbook

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=C101724&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hsubt:	Enthalpy of sublimation at a given temperature
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
tf:	Normal melting (fusion) point
vc:	Critical Volume