[1,1'-Biphenyl]-3-amine

Other names:	3-Biphenylamine
	3-Aminobiphenyl
	m-Aminobiphenyl
	m-Phenylaniline
	3-Phenylaniline
Inchi:	InChI=1S/C12H11N/c13-12-8-4-7-11(9-12)10-5-2-1-3-6-10/h1-9H,13H2
InchiKey:	MUNOBADFTHUUFG-UHFFFAOYSA-N
Formula:	C12H11N
SMILES:	Nc1cccc(-c2ccccc2)c1
Mol. weight [g/mol]:	169.22
CAS:	2243-47-2

Physical Properties

Property code	Value	Unit	Source
gf	331.80	kJ/mol	Joback Method
hf	204.37	kJ/mol	Joback Method
hfus	19.73	kJ/mol	Joback Method
hvap	58.16	kJ/mol	Joback Method
log10ws	-3.71		Crippen Method
logp	2.936		Crippen Method
mcvol	142.400	ml/mol	McGowan Method
pc	3602.88	kPa	Joback Method
rinpol	297.33		NIST Webbook
tb	604.83	K	Joback Method
tc	863.82	K	Joback Method
tf	304.30 ± 0.30	K	NIST Webbook
vc	0.520	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	335.82	J/mol×K	604.83	Joback Method
cpg	350.95	J/mol×K	647.99	Joback Method
cpg	364.81	J/mol×K	691.16	Joback Method

cpg	377.49	J/mol×K	734.32	Joback Method
cpg	389.06	J/mol×K	777.49	Joback Method
cpg	399.61	J/mol×K	820.65	Joback Method
cpg	409.23	J/mol×K	863.82	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	527.20	K	18.00	NIST Webbook
tbrp	450.20	K	2.40	NIST Webbook
tbrp	527.00	K	18.00	NIST Webbook
tbrp	450.50 ± 0.50	K	2.40	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=C2243472&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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
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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tbrp: Boiling point at reduced pressure

tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume