Benzenamine, 2-(phenylmethyl)-

Other names:	o-Aminodiphenylmethane
	o-Benzylaniline
	o-Toluidine, «alpha»-phenyl-
	2-Benzylaniline
	2-Aminodiphenylmethane
Inchi:	InChI=1S/C13H13N/c14-13-9-5-4-8-12(13)10-11-6-2-1-3-7-11/h1-9H,10,14H2
InchiKey:	DWOBGCPUQNFAFB-UHFFFAOYSA-N
Formula:	C13H13N
SMILES:	Nc1ccccc1Cc1ccccc1
Mol. weight [g/mol]:	183.25
CAS:	28059-64-5

Physical Properties

Property code	Value	Unit	Source
gf	340.22	kJ/mol	Joback Method
hf	183.73	kJ/mol	Joback Method
hfus	22.32	kJ/mol	Joback Method
hvap	60.39	kJ/mol	Joback Method
log10ws	-3.21		Crippen Method
logp	2.860		Crippen Method
mcvol	156.490	ml/mol	McGowan Method
pc	3220.98	kPa	Joback Method
tb	627.71	K	Joback Method
tc	880.71	K	Joback Method
tf	325.00	K	NIST Webbook
vc	0.577	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	384.23	J/mol×K	627.71	Joback Method
cpg	400.02	J/mol×K	669.88	Joback Method
cpg	414.54	J/mol×K	712.04	Joback Method
cpg	427.85	J/mol×K	754.21	Joback Method

cpg	440.06	J/mol×K	796.37	Joback Method
cpg	451.22	J/mol×K	838.54	Joback Method
cpg	461.44	J/mol×K	880.71	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	445.70	K	1.60	NIST Webbook
tbrp	463.00	K	2.90	NIST Webbook
tbrp	445.00	K	1.60	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=C28059645&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
tb: Normal Boiling Point Temperature
tbrp: Boiling point at reduced pressure
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume