4-Aminostyrene

Other names:	Benzenamine, 4-ethenyl-
	p-Aminostyrene
	Aniline, p-vinyl-
	4-vinylaniline
Inchi:	InChI=1S/C8H9N/c1-2-7-3-5-8(9)6-4-7/h2-6H,1,9H2
InchiKey:	LBSXSAXOLABXMF-UHFFFAOYSA-N
Formula:	C8H9N
SMILES:	C=Cc1ccc(N)cc1
Mol. weight [g/mol]:	119.16
CAS:	1520-21-4

Physical Properties

Property code	Value	Unit	Source
gf	273.55	kJ/mol	Joback Method
hf	175.83	kJ/mol	Joback Method
hfus	14.04	kJ/mol	Joback Method
hvap	46.31	kJ/mol	Joback Method
log10ws	-1.93		Crippen Method
logp	1.912		Crippen Method
mcvol	105.500	ml/mol	McGowan Method
pc	4051.80	kPa	Joback Method
tb	483.31	K	Joback Method
tc	712.87	K	Joback Method
tf	298.00	K	NIST Webbook
vc	0.386	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	211.57	J/mol×K	483.31	Joback Method
cpg	223.39	J/mol×K	521.57	Joback Method
cpg	234.43	J/mol×K	559.83	Joback Method
cpg	244.73	J/mol×K	598.09	Joback Method
cpg	254.34	J/mol×K	636.35	Joback Method

cpg	263.28	J/mol×K	674.61	Joback Method
cpg	271.60	J/mol×K	712.87	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	389.20	K	1.00	NIST Webbook
tbrp	389.00 ± 1.00	K	1.15	NIST Webbook
tbrp	348.50 ± 1.50	K	0.30	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=C1520214&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
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

Latest version available from:

https://www.chemeo.com/cid/33-847-5/4-Aminostyrene.pdf

Generated by Cheméo on 2024-10-12 09:34:16.382134181 +0000 UTC m=+3306519.019103444.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.