Benzenamine, 2-propyl-

Other names:	1-Amino-2-propylbenzene
	2-Propylaniline
	Aniline, 2-propyl-
	Aniline, o-propyl-
	o-Aminopropylbenzene
	o-Propylaniline
Inchi:	InChI=1S/C9H13N/c1-2-5-8-6-3-4-7-9(8)10/h3-4,6-7H,2,5,10H2,1H3
InchiKey:	WKURVXXDGMYSDP-UHFFFAOYSA-N
Formula:	C9H13N
SMILES:	CCCc1ccccc1N
Mol. weight [g/mol]:	135.21
CAS:	1821-39-2

Physical Properties

Property code	Value	Unit	Source
gf	194.13	kJ/mol	Joback Method
hf	29.76	kJ/mol	Joback Method
hfus	17.92	kJ/mol	Joback Method
hvap	49.21	kJ/mol	Joback Method
log10ws	-2.33		Crippen Method
logp	2.221		Crippen Method
mcvol	123.890	ml/mol	McGowan Method
pc	3423.86	kPa	Joback Method
ripol	1975.00		NIST Webbook
tb	496.20	K	NIST Webbook
tc	730.11	K	Joback Method
tf	313.39	K	Joback Method
vc	0.461	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	271.53	J/mol×K	509.51	Joback Method
cpg	285.22	J/mol×K	546.28	Joback Method

cpg	298.11	J/mol×K	583.04	Joback Method
cpg	310.23	J/mol×K	619.81	Joback Method
cpg	321.61	J/mol×K	656.58	Joback Method
cpg	332.28	J/mol×K	693.35	Joback Method
cpg	342.28	J/mol×K	730.11	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	389.20	K	2.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.50794e+01
Coeff. B	-4.35480e+03
Coeff. C	-7.99140e+01
Temperature range (K), min.	374.32
Temperature range (K), max.	525.74

Sources

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
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=C1821392&Units=SI

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
pvap:	Vapor pressure
ripol:	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