2-sec-Butylaniline

Other names: Benzenamine, 2-(1-methylpropyl)-
Aniline, o-sec-butyl-
Inchi: InChI=1S/C10H15N/c1-3-8(2)9-6-4-5-7-10(9)11/h4-8H,3,11H2,1-2H3
InchiKey: XAGPXEVNCJHXCL-UHFFFAOYSA-N
Formula: C10H15N
SMILES: CCC(C)c1ccccc1N
Mol. weight [g/mol]: 149.23
CAS: 55751-54-7

Physical Properties

Property code	Value	Unit	Source
gf	200.11	kJ/mol	Joback Method
hf	3.84	kJ/mol	Joback Method
hfus	16.98	kJ/mol	Joback Method
hvap	51.05	kJ/mol	Joback Method
log10ws	-2.71		Crippen Method
logp	2.782		Crippen Method
mcvol	137.980	ml/mol	McGowan Method
pc	3096.73	kPa	Joback Method
tb	531.95	K	Joback Method
tc	753.77	K	Joback Method
tf	309.66	K	Joback Method
vc	0.510	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	316.49	J/mol×K	531.95	Joback Method
cpg	331.53	J/mol×K	568.92	Joback Method
cpg	345.68	J/mol×K	605.89	Joback Method
cpg	358.96	J/mol×K	642.86	Joback Method
cpg	371.42	J/mol×K	679.83	Joback Method
cpg	383.09	J/mol×K	716.80	Joback Method
cpg	394.01	J/mol×K	753.77	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55751547&Units=SI
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

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