2-Pentyn-1-amine, N,N-diethyl-

Other names: 1-Diethylamino-2-pentyne
Inchi: InChI=1S/C9H17N/c1-4-7-8-9-10(5-2)6-3/h4-6,9H2,1-3H3
InchiKey: GLYRYDQBPLDITK-UHFFFAOYSA-N
Formula: C9H17N
SMILES: CCC#CCN(CC)CC
Mol. weight [g/mol]: 139.24
CAS: 73117-10-9

Physical Properties

Property code	Value	Unit	Source
gf	338.48	kJ/mol	Joback Method
hf	110.74	kJ/mol	Joback Method
hfus	25.21	kJ/mol	Joback Method
hvap	39.82	kJ/mol	Joback Method
log10ws	-1.95		Crippen Method
logp	1.742		Crippen Method
mcvol	139.050	ml/mol	McGowan Method
pc	2701.41	kPa	Joback Method
tb	426.76	K	Joback Method
tc	610.81	K	Joback Method
tf	329.76	K	Joback Method
vc	0.519	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	277.22	J/mol×K	426.76	Joback Method
cpg	291.60	J/mol×K	457.44	Joback Method
cpg	305.36	J/mol×K	488.11	Joback Method
cpg	318.51	J/mol×K	518.79	Joback Method
cpg	331.07	J/mol×K	549.46	Joback Method
cpg	343.07	J/mol×K	580.14	Joback Method
cpg	354.52	J/mol×K	610.81	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C73117109&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