5-Diethylamino-1-pentanol

Other names: 1-Pentanol, 5-(diethylamino)-
Inchi: InChI=1S/C9H21NO/c1-3-10(4-2)8-6-5-7-9-11/h11H,3-9H2,1-2H3
InchiKey: RUQDFMATAGUGMU-UHFFFAOYSA-N
Formula: C9H21NO
SMILES: CCN(CC)CCCCCO
Mol. weight [g/mol]: 159.27
CAS: 2683-57-0

Physical Properties

Property code	Value	Unit	Source
gf	-1.14	kJ/mol	Joback Method
hf	-313.79	kJ/mol	Joback Method
hfus	26.18	kJ/mol	Joback Method
hvap	54.35	kJ/mol	Joback Method
log10ws	-1.42		Crippen Method
logp	1.491		Crippen Method
mcvol	153.520	ml/mol	McGowan Method
pc	2520.12	kPa	Joback Method
tb	509.94	K	Joback Method
tc	667.95	K	Joback Method
tf	284.48	K	Joback Method
vc	0.577	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	368.45	J/mol×K	509.94	Joback Method
cpg	381.54	J/mol×K	536.27	Joback Method
cpg	394.11	J/mol×K	562.61	Joback Method
cpg	406.18	J/mol×K	588.94	Joback Method
cpg	417.74	J/mol×K	615.28	Joback Method
cpg	428.83	J/mol×K	641.61	Joback Method
cpg	439.46	J/mol×K	667.95	Joback Method

Sources

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=C2683570&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume