Diamyl butyl amine

Other names:	Butyl dipentyl amine
	1-Pentanamine, N-butyl-N-pentyl
Inchi:	InChI=1S/C14H31N/c1-4-7-10-13-15(12-9-6-3)14-11-8-5-2/h4-14H2,1-3H3
InchiKey:	MBFFDRCECCIDSD-UHFFFAOYSA-N
Formula:	C14H31N
SMILES:	CCCCCN(CCCC)CCCCC
Mol. weight [g/mol]:	213.40

Physical Properties

Property code	Value	Unit	Source
gf	177.78	kJ/mol	Joback Method
hf	-264.76	kJ/mol	Joback Method
hfus	35.04	kJ/mol	Joback Method
hvap	48.80	kJ/mol	Joback Method
log10ws	-4.25		Crippen Method
logp	4.469		Crippen Method
mcvol	218.100	ml/mol	McGowan Method
pc	1521.12	kPa	Joback Method
rinpol	1341.70		NIST Webbook
rinpol	1345.00		NIST Webbook
rinpol	1345.00		NIST Webbook
tb	532.16	K	Joback Method
tc	690.75	K	Joback Method
tf	280.01	K	Joback Method
vc	0.838	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	543.46	J/mol×K	532.16	Joback Method
cpg	562.02	J/mol×K	558.59	Joback Method
cpg	579.85	J/mol×K	585.02	Joback Method
cpg	596.96	J/mol×K	611.45	Joback Method
cpg	613.37	J/mol×K	637.89	Joback Method

cpg	629.11	J/mol×K	664.32	Joback Method
cpg	644.21	J/mol×K	690.75	Joback Method

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=R19167&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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