Didodecylamine, n-butyl-

Inchi: InChI=1S/C28H59N/c1-4-7-10-12-14-16-18-20-22-24-27-29(26-9-6-3)28-25-23-21-19-17-
InchiKey: AAYBEEVEVAWXAI-UHFFFAOYSA-N
Formula: C28H59N
SMILES: CCCCCCCCCCCCN(CCCC)CCCCCCCCCCCC
Mol. weight [g/mol]: 409.77
CAS: 52770-72-6

Physical Properties

Property code	Value	Unit	Source
gf	295.66	kJ/mol	Joback Method
hf	-553.72	kJ/mol	Joback Method
hfus	71.30	kJ/mol	Joback Method
hvap	79.96	kJ/mol	Joback Method
log10ws	-10.11		Crippen Method
logp	9.930		Crippen Method
mcvol	415.360	ml/mol	McGowan Method
pc	654.77	kPa	Joback Method
tb	852.48	K	Joback Method
tc	1046.78	K	Joback Method
tf	437.79	K	Joback Method
vc	1.621	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1394.43	J/mol×K	852.48	Joback Method
cpg	1420.37	J/mol×K	884.86	Joback Method
cpg	1444.92	J/mol×K	917.25	Joback Method
cpg	1468.17	J/mol×K	949.63	Joback Method
cpg	1490.18	J/mol×K	982.01	Joback Method
cpg	1511.04	J/mol×K	1014.39	Joback Method
cpg	1530.80	J/mol×K	1046.78	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=C52770726&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

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