Benzamide, N,N-didecyl-3-methyl-

Inchi: InChI=1S/C28H49NO/c1-4-6-8-10-12-14-16-18-23-29(24-19-17-15-13-11-9-7-5-2)28(30)
InchiKey: ZFGWBGRTJQAQAU-UHFFFAOYSA-N
Formula: C28H49NO
SMILES: CCCCCCCCCCN(CCCCCCCCCC)C(=O)c1cccc(C)c1
Mol. weight [g/mol]: 415.69

Physical Properties

Property code	Value	Unit	Source
gf	269.52	kJ/mol	Joback Method
hf	-441.24	kJ/mol	Joback Method
hfus	66.55	kJ/mol	Joback Method
hvap	89.65	kJ/mol	Joback Method
log10ws	-9.63		Crippen Method
logp	8.719		Crippen Method
mcvol	393.170	ml/mol	McGowan Method
pc	802.97	kPa	Joback Method
rinpol	3126.00		NIST Webbook
rinpol	3126.00		NIST Webbook
tb	938.01	K	Joback Method
tc	1148.76	K	Joback Method
tf	526.66	K	Joback Method
vc	1.520	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1332.66	J/mol×K	938.01	Joback Method
cpg	1353.96	J/mol×K	973.14	Joback Method
cpg	1373.94	J/mol×K	1008.26	Joback Method
cpg	1392.70	J/mol×K	1043.39	Joback Method
cpg	1410.33	J/mol×K	1078.51	Joback Method
cpg	1426.92	J/mol×K	1113.64	Joback Method
cpg	1442.55	J/mol×K	1148.76	Joback Method

Sources

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=U308563&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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