Benzamide, N-decyl-N-methyl-4-chloro-

Inchi: InChI=1S/C18H28ClNO/c1-3-4-5-6-7-8-9-10-15-20(2)18(21)16-11-13-17(19)14-12-16/h1
InchiKey: ORXPNBVUTWVQKS-UHFFFAOYSA-N
Formula: C18H28ClNO
SMILES: CCCCCCCCCCN(C)C(=O)c1ccc(Cl)cc1
Mol. weight [g/mol]: 309.87

Physical Properties

Property code	Value	Unit	Source
gf	173.39	kJ/mol	Joback Method
hf	-250.58	kJ/mol	Joback Method
hfus	44.84	kJ/mol	Joback Method
hvap	71.77	kJ/mol	Joback Method
log10ws	-6.07		Crippen Method
logp	5.553		Crippen Method
mcvol	264.510	ml/mol	McGowan Method
pc	1472.49	kPa	Joback Method
rinpol	2335.00		NIST Webbook
rinpol	2335.00		NIST Webbook
tb	746.64	K	Joback Method
tc	942.69	K	Joback Method
tf	443.88	K	Joback Method
vc	1.008	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	753.39	J/mol×K	746.64	Joback Method
cpg	770.43	J/mol×K	779.31	Joback Method
cpg	786.46	J/mol×K	811.99	Joback Method
cpg	801.54	J/mol×K	844.66	Joback Method
cpg	815.71	J/mol×K	877.34	Joback Method
cpg	829.03	J/mol×K	910.01	Joback Method
cpg	841.55	J/mol×K	942.69	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308588&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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