Benzamide, N-decyl-N-methyl-4-ethyl-

Inchi: InChI=1S/C20H33NO/c1-4-6-7-8-9-10-11-12-17-21(3)20(22)19-15-13-18(5-2)14-16-19/h1
InchiKey: GQFZPHRYTLHXES-UHFFFAOYSA-N
Formula: C20H33NO
SMILES: CCCCCCCCCCN(C)C(=O)c1ccc(CC)cc1
Mol. weight [g/mol]: 303.48

Physical Properties

Property code	Value	Unit	Source
gf	202.16	kJ/mol	Joback Method
hf	-276.12	kJ/mol	Joback Method
hfus	45.83	kJ/mol	Joback Method
hvap	71.84	kJ/mol	Joback Method
log10ws	-6.19		Crippen Method
logp	5.462		Crippen Method
mcvol	280.450	ml/mol	McGowan Method
pc	1311.80	kPa	Joback Method
rinpol	2404.00		NIST Webbook
tb	754.97	K	Joback Method
tc	945.36	K	Joback Method
tf	436.50	K	Joback Method
vc	1.071	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	837.43	J/mol×K	754.97	Joback Method
cpg	856.07	J/mol×K	786.70	Joback Method
cpg	873.65	J/mol×K	818.43	Joback Method
cpg	890.24	J/mol×K	850.16	Joback Method
cpg	905.89	J/mol×K	881.89	Joback Method
cpg	920.64	J/mol×K	913.63	Joback Method
cpg	934.54	J/mol×K	945.36	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=U308546&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