Cyclohexanecarboxamide, N-decyl-N-methyl-

Inchi: InChI=1S/C18H35NO/c1-3-4-5-6-7-8-9-13-16-19(2)18(20)17-14-11-10-12-15-17/h17H,3-
InchiKey: FMCICJSORXIOHC-UHFFFAOYSA-N
Formula: C18H35NO
SMILES: CCCCCCCCCCN(C)C(=O)C1CCCCC1
Mol. weight [g/mol]: 281.48

Physical Properties

Property code	Value	Unit	Source
gf	106.99	kJ/mol	Joback Method
hf	-405.58	kJ/mol	Joback Method
hfus	38.83	kJ/mol	Joback Method
hvap	64.88	kJ/mol	Joback Method
log10ws	-5.36		Crippen Method
logp	5.166		Crippen Method
mcvol	265.170	ml/mol	McGowan Method
pc	1392.29	kPa	Joback Method
rinpol	2171.00		NIST Webbook
tb	697.10	K	Joback Method
tc	883.65	K	Joback Method
tf	382.40	K	Joback Method
vc	1.000	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	796.63	J/mol×K	697.10	Joback Method
cpg	818.03	J/mol×K	728.19	Joback Method
cpg	838.25	J/mol×K	759.28	Joback Method
cpg	857.35	J/mol×K	790.38	Joback Method
cpg	875.37	J/mol×K	821.47	Joback Method
cpg	892.35	J/mol×K	852.56	Joback Method
cpg	908.34	J/mol×K	883.65	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308522&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

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