Cyclobutanecarboxamide, N-decyl-N-methyl-

Inchi: InChI=1S/C16H31NO/c1-3-4-5-6-7-8-9-10-14-17(2)16(18)15-12-11-13-15/h15H,3-14H2,1
InchiKey: CGXMBDCQLWLJQJ-UHFFFAOYSA-N
Formula: C16H31NO
SMILES: CCCCCCCCCCN(C)C(=O)C1CCC1
Mol. weight [g/mol]: 253.42

Physical Properties

Property code	Value	Unit	Source
gf	114.35	kJ/mol	Joback Method
hf	-351.98	kJ/mol	Joback Method
hfus	37.85	kJ/mol	Joback Method
hvap	60.08	kJ/mol	Joback Method
log10ws	-4.52		Crippen Method
logp	4.386		Crippen Method
mcvol	236.990	ml/mol	McGowan Method
pc	1552.45	kPa	Joback Method
rinpol	1948.00		NIST Webbook
rinpol	1948.00		NIST Webbook
tb	642.80	K	Joback Method
tc	822.21	K	Joback Method
tf	366.90	K	Joback Method
vc	0.904	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	674.79	J/mol×K	642.80	Joback Method
cpg	694.36	J/mol×K	672.70	Joback Method
cpg	712.95	J/mol×K	702.60	Joback Method
cpg	730.58	J/mol×K	732.50	Joback Method
cpg	747.31	J/mol×K	762.40	Joback Method
cpg	763.18	J/mol×K	792.30	Joback Method
cpg	778.24	J/mol×K	822.21	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=U308599&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume