Cyclopentanecarboxamide, N-butyl-N-heptyl-

Inchi: InChI=1S/C17H33NO/c1-3-5-7-8-11-15-18(14-6-4-2)17(19)16-12-9-10-13-16/h16H,3-15H
InchiKey: HUAAYLLDQKPEQI-UHFFFAOYSA-N
Formula: C17H33NO
SMILES: CCCCCCCN(CCCC)C(=O)C1CCCC1
Mol. weight [g/mol]: 267.45

Physical Properties

Property code	Value	Unit	Source
gf	110.67	kJ/mol	Joback Method
hf	-378.78	kJ/mol	Joback Method
hfus	38.34	kJ/mol	Joback Method
hvap	62.48	kJ/mol	Joback Method
log10ws	-4.94		Crippen Method
logp	4.776		Crippen Method
mcvol	251.080	ml/mol	McGowan Method
pc	1469.10	kPa	Joback Method
rinpol	2550.00		NIST Webbook
rinpol	2550.00		NIST Webbook
tb	669.95	K	Joback Method
tc	852.96	K	Joback Method
tf	374.65	K	Joback Method
vc	0.953	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	734.78	J/mol×K	669.95	Joback Method
cpg	755.32	J/mol×K	700.45	Joback Method
cpg	774.78	J/mol×K	730.95	Joback Method
cpg	793.21	J/mol×K	761.45	Joback Method
cpg	810.65	J/mol×K	791.96	Joback Method
cpg	827.14	J/mol×K	822.46	Joback Method
cpg	842.74	J/mol×K	852.96	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U415632&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