Cyclobutanecarboxamide, N,N-diheptyl-

Inchi: InChI=1S/C19H37NO/c1-3-5-7-9-11-16-20(17-12-10-8-6-4-2)19(21)18-14-13-15-18/h18H
InchiKey: UYEUNIFMFPCGDT-UHFFFAOYSA-N
Formula: C19H37NO
SMILES: CCCCCCCN(CCCCCCC)C(=O)C1CCC1
Mol. weight [g/mol]: 295.50

Physical Properties

Property code	Value	Unit	Source
gf	139.61	kJ/mol	Joback Method
hf	-413.90	kJ/mol	Joback Method
hfus	45.62	kJ/mol	Joback Method
hvap	66.76	kJ/mol	Joback Method
log10ws	-5.77		Crippen Method
logp	5.556		Crippen Method
mcvol	279.260	ml/mol	McGowan Method
pc	1252.15	kPa	Joback Method
rinpol	2117.00		NIST Webbook
tb	711.44	K	Joback Method
tc	889.52	K	Joback Method
tf	400.71	K	Joback Method
vc	1.073	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	848.54	J/mol×K	711.44	Joback Method
cpg	868.88	J/mol×K	741.12	Joback Method
cpg	888.19	J/mol×K	770.80	Joback Method
cpg	906.52	J/mol×K	800.48	Joback Method
cpg	923.93	J/mol×K	830.16	Joback Method
cpg	940.46	J/mol×K	859.84	Joback Method
cpg	956.16	J/mol×K	889.52	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308601&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