Cyclobutanecarboxamide, N-heptyl-N-octyl-

Inchi: InChI=1S/C20H39NO/c1-3-5-7-9-11-13-18-21(17-12-10-8-6-4-2)20(22)19-15-14-16-19/h1
InchiKey: XIUCQIIWLUJNJR-UHFFFAOYSA-N
Formula: C20H39NO
SMILES: CCCCCCCCN(CCCCCCC)C(=O)C1CCC1
Mol. weight [g/mol]: 309.53

Physical Properties

Property code	Value	Unit	Source
gf	148.03	kJ/mol	Joback Method
hf	-434.54	kJ/mol	Joback Method
hfus	48.21	kJ/mol	Joback Method
hvap	68.99	kJ/mol	Joback Method
log10ws	-6.19		Crippen Method
logp	5.946		Crippen Method
mcvol	293.350	ml/mol	McGowan Method
pc	1171.22	kPa	Joback Method
rinpol	2212.00		NIST Webbook
rinpol	2212.00		NIST Webbook
tb	734.32	K	Joback Method
tc	912.91	K	Joback Method
tf	411.98	K	Joback Method
vc	1.129	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	908.54	J/mol×K	734.32	Joback Method
cpg	929.14	J/mol×K	764.08	Joback Method
cpg	948.69	J/mol×K	793.85	Joback Method
cpg	967.25	J/mol×K	823.61	Joback Method
cpg	984.87	J/mol×K	853.38	Joback Method
cpg	1001.61	J/mol×K	883.14	Joback Method
cpg	1017.51	J/mol×K	912.91	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=U308602&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