Cyclopropanecarboxamide, N,N-dioctyl-

Inchi: InChI=1S/C20H39NO/c1-3-5-7-9-11-13-17-21(20(22)19-15-16-19)18-14-12-10-8-6-4-2/h1
InchiKey: PDZCJOBNUIWYFY-UHFFFAOYSA-N
Formula: C20H39NO
SMILES: CCCCCCCCN(CCCCCCCC)C(=O)C1CC1
Mol. weight [g/mol]: 309.53

Physical Properties

Property code	Value	Unit	Source
gf	160.13	kJ/mol	Joback Method
hf	-428.38	kJ/mol	Joback Method
hfus	50.31	kJ/mol	Joback Method
hvap	68.82	kJ/mol	Joback Method
log10ws	-6.19		Crippen Method
logp	5.946		Crippen Method
mcvol	293.350	ml/mol	McGowan Method
pc	1151.44	kPa	Joback Method
rinpol	2270.00		NIST Webbook
tb	730.05	K	Joback Method
tc	905.46	K	Joback Method
tf	415.50	K	Joback Method
vc	1.137	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	904.53	J/mol×K	730.05	Joback Method
cpg	924.63	J/mol×K	759.28	Joback Method
cpg	943.76	J/mol×K	788.52	Joback Method
cpg	961.97	J/mol×K	817.75	Joback Method
cpg	979.30	J/mol×K	846.99	Joback Method
cpg	995.82	J/mol×K	876.22	Joback Method
cpg	1011.57	J/mol×K	905.46	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308582&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