Cyclohexanecarboxamide, N,N-dinonyl-

Inchi: InChI=1S/C25H49NO/c1-3-5-7-9-11-13-18-22-26(23-19-14-12-10-8-6-4-2)25(27)24-20-1
InchiKey: WVJOVNWIYZGUIX-UHFFFAOYSA-N
Formula: C25H49NO
SMILES: CCCCCCCCCN(CCCCCCCCC)C(=O)C1CCCCC1
Mol. weight [g/mol]: 379.66

Physical Properties

Property code	Value	Unit	Source
gf	165.93	kJ/mol	Joback Method
hf	-550.06	kJ/mol	Joback Method
hfus	56.96	kJ/mol	Joback Method
hvap	80.46	kJ/mol	Joback Method
log10ws	-8.29		Crippen Method
logp	7.896		Crippen Method
mcvol	363.800	ml/mol	McGowan Method
pc	890.00	kPa	Joback Method
rinpol	2735.00		NIST Webbook
rinpol	2735.00		NIST Webbook
tb	857.26	K	Joback Method
tc	1051.09	K	Joback Method
tf	461.29	K	Joback Method
vc	1.393	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1231.18	J/mol×K	857.26	Joback Method
cpg	1253.77	J/mol×K	889.56	Joback Method
cpg	1275.01	J/mol×K	921.87	Joback Method
cpg	1294.98	J/mol×K	954.17	Joback Method
cpg	1313.72	J/mol×K	986.48	Joback Method
cpg	1331.32	J/mol×K	1018.78	Joback Method
cpg	1347.83	J/mol×K	1051.09	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308527&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