Cyclobutanecarboxamide, N,N-dinonyl-

Inchi: InChI=1S/C23H45NO/c1-3-5-7-9-11-13-15-20-24(23(25)22-18-17-19-22)21-16-14-12-10-
InchiKey: HRYWIIHQUINOQB-UHFFFAOYSA-N
Formula: C23H45NO
SMILES: CCCCCCCCCN(CCCCCCCCC)C(=O)C1CCC1
Mol. weight [g/mol]: 351.61

Physical Properties

Property code	Value	Unit	Source
gf	173.29	kJ/mol	Joback Method
hf	-496.46	kJ/mol	Joback Method
hfus	55.98	kJ/mol	Joback Method
hvap	75.67	kJ/mol	Joback Method
log10ws	-7.45		Crippen Method
logp	7.116		Crippen Method
mcvol	335.620	ml/mol	McGowan Method
pc	970.49	kPa	Joback Method
rinpol	2506.00		NIST Webbook
tb	802.96	K	Joback Method
tc	986.68	K	Joback Method
tf	445.79	K	Joback Method
vc	1.296	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1093.85	J/mol×K	802.96	Joback Method
cpg	1115.37	J/mol×K	833.58	Joback Method
cpg	1135.79	J/mol×K	864.20	Joback Method
cpg	1155.14	J/mol×K	894.82	Joback Method
cpg	1173.51	J/mol×K	925.44	Joback Method
cpg	1190.95	J/mol×K	956.06	Joback Method
cpg	1207.53	J/mol×K	986.68	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308604&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

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