Cyclopentanecarboxamide, N,N-bis(2-ethylhexyl)-

Inchi: InChI=1S/C22H43NO/c1-5-9-13-19(7-3)17-23(18-20(8-4)14-10-6-2)22(24)21-15-11-12-1

InchiKey: ITYCDYBYLCSIDA-UHFFFAOYSA-N

Formula: C22H43NO

SMILES: CCCCC(CC)CN(CC(CC)CCCC)C(=O)C1CCCC1

Mol. weight [g/mol]: 337.58

Physical Properties

Property code	Value	Unit	Source
gf	147.89	kJ/mol	Joback Method
hf	-492.54	kJ/mol	Joback Method
hfus	44.24	kJ/mol	Joback Method
hvap	72.84	kJ/mol	Joback Method
log10ws	-6.55		Crippen Method
logp	6.438		Crippen Method
mcvol	321.530	ml/mol	McGowan Method
pc	1058.95	kPa	Joback Method
rinpol	2151.00		NIST Webbook
rinpol	2151.00		NIST Webbook
tb	783.47	K	Joback Method
tc	970.41	K	Joback Method
tf	401.00	K	Joback Method
vc	1.220	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1036.65	J/mol×K	783.47	Joback Method
cpg	1058.55	J/mol×K	814.63	Joback Method
cpg	1079.24	J/mol×K	845.78	Joback Method
cpg	1098.78	J/mol×K	876.94	Joback Method
cpg	1117.21	J/mol×K	908.10	Joback Method
cpg	1134.61	J/mol×K	939.25	Joback Method
cpg	1151.02	J/mol×K	970.41	Joback Method

Sources

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=U308612&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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