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

Inchi: InChI=1S/C21H41NO/c1-5-9-12-18(7-3)16-22(21(23)20-14-11-15-20)17-19(8-4)13-10-6-

InchiKey: AHCJDKDIJJBQGH-UHFFFAOYSA-N

Formula: C21H41NO

SMILES: CCCCC(CC)CN(CC(CC)CCCC)C(=O)C1CCC1

Mol. weight [g/mol]: 323.56

Physical Properties

Property code	Value	Unit	Source
gf	151.57	kJ/mol	Joback Method
hf	-465.74	kJ/mol	Joback Method
hfus	43.76	kJ/mol	Joback Method
hvap	70.44	kJ/mol	Joback Method
log10ws	-6.13		Crippen Method
logp	6.048		Crippen Method
mcvol	307.440	ml/mol	McGowan Method
pc	1109.63	kPa	Joback Method
rinpol	2085.00		NIST Webbook
rinpol	2085.00		NIST Webbook
tb	756.32	K	Joback Method
tc	939.16	K	Joback Method
tf	393.25	K	Joback Method
vc	1.173	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	970.33	J/mol×K	756.32	Joback Method
cpg	991.60	J/mol×K	786.79	Joback Method
cpg	1011.76	J/mol×K	817.27	Joback Method
cpg	1030.85	J/mol×K	847.74	Joback Method
cpg	1048.94	J/mol×K	878.21	Joback Method
cpg	1066.09	J/mol×K	908.69	Joback Method
cpg	1082.35	J/mol×K	939.16	Joback Method

Sources

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=U308600&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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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