Benzamide, N,N-di(2-ethylhexyl)-

Inchi: InChI=1S/C23H39NO/c1-5-9-14-21(8-4)19-24(18-17-20(7-3)13-6-2)23(25)22-15-11-10-1
InchiKey: BZOJFEXBZUIMDQ-UHFFFAOYSA-N
Formula: C23H39NO
SMILES: CCCCC(CC)CN(CCC(CC)CCC)C(=O)c1ccccc1
Mol. weight [g/mol]: 345.56

Physical Properties

Property code	Value	Unit	Source
gf	232.17	kJ/mol	Joback Method
hf	-337.13	kJ/mol	Joback Method
hfus	46.94	kJ/mol	Joback Method
hvap	77.08	kJ/mol	Joback Method
log10ws	-6.99		Crippen Method
logp	6.562		Crippen Method
mcvol	322.720	ml/mol	McGowan Method
pc	1097.90	kPa	Joback Method
rinpol	2366.00		NIST Webbook
rinpol	2366.00		NIST Webbook
tb	817.75	K	Joback Method
tc	1012.13	K	Joback Method
tf	427.79	K	Joback Method
vc	1.228	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1018.62	J/mol×K	817.75	Joback Method
cpg	1038.36	J/mol×K	850.15	Joback Method
cpg	1056.93	J/mol×K	882.54	Joback Method
cpg	1074.41	J/mol×K	914.94	Joback Method
cpg	1090.84	J/mol×K	947.34	Joback Method
cpg	1106.31	J/mol×K	979.73	Joback Method
cpg	1120.87	J/mol×K	1012.13	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360148&Units=SI

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