Benzamide, N,N-bis(2-ethylhexyl)-3-methyl-

Inchi: InChI=1S/C24H41NO/c1-6-10-14-21(8-3)18-25(19-22(9-4)15-11-7-2)24(26)23-16-12-13-
InchiKey: ZQDOLJLTWGXCLP-UHFFFAOYSA-N
Formula: C24H41NO
SMILES: CCCCC(CC)CN(CC(CC)CCCC)C(=O)c1cccc(C)c1
Mol. weight [g/mol]: 359.59

Physical Properties

Property code	Value	Unit	Source
gf	230.96	kJ/mol	Joback Method
hf	-369.24	kJ/mol	Joback Method
hfus	49.14	kJ/mol	Joback Method
hvap	79.97	kJ/mol	Joback Method
log10ws	-7.47		Crippen Method
logp	6.870		Crippen Method
mcvol	336.810	ml/mol	McGowan Method
pc	1021.38	kPa	Joback Method
rinpol	2407.00		NIST Webbook
tb	845.61	K	Joback Method
tc	1042.23	K	Joback Method
tf	451.58	K	Joback Method
vc	1.284	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1080.27	J/mol×K	845.61	Joback Method
cpg	1100.14	J/mol×K	878.38	Joback Method
cpg	1118.83	J/mol×K	911.15	Joback Method
cpg	1136.40	J/mol×K	943.92	Joback Method
cpg	1152.92	J/mol×K	976.69	Joback Method
cpg	1168.46	J/mol×K	1009.46	Joback Method
cpg	1183.06	J/mol×K	1042.23	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=U308558&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