Propanamide, N,N-bis(2-ethylhexyl)-3-phenyl-

Inchi: InChI=1S/C25H43NO/c1-5-9-14-22(7-3)20-26(21-23(8-4)15-10-6-2)25(27)19-18-24-16-1
InchiKey: FHIAPOALXTYFEJ-UHFFFAOYSA-N
Formula: C25H43NO
SMILES: CCCCC(CC)CN(CC(CC)CCCC)C(=O)CCc1ccccc1
Mol. weight [g/mol]: 373.62

Physical Properties

Property code	Value	Unit	Source
gf	249.01	kJ/mol	Joback Method
hf	-378.41	kJ/mol	Joback Method
hfus	52.12	kJ/mol	Joback Method
hvap	81.53	kJ/mol	Joback Method
log10ws	-7.25		Crippen Method
logp	6.881		Crippen Method
mcvol	350.900	ml/mol	McGowan Method
pc	970.49	kPa	Joback Method
rinpol	2534.00		NIST Webbook
rinpol	2534.00		NIST Webbook
tb	863.51	K	Joback Method
tc	1061.30	K	Joback Method
tf	450.33	K	Joback Method
vc	1.339	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1142.60	J/mol×K	863.51	Joback Method
cpg	1162.80	J/mol×K	896.47	Joback Method
cpg	1181.78	J/mol×K	929.44	Joback Method
cpg	1199.63	J/mol×K	962.40	Joback Method
cpg	1216.42	J/mol×K	995.37	Joback Method
cpg	1232.22	J/mol×K	1028.33	Joback Method
cpg	1247.11	J/mol×K	1061.30	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=U308216&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