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

Inchi: InChI=1S/C24H49NO/c1-6-11-14-15-16-19-24(26)25(20-22(9-4)17-12-7-2)21-23(10-5)18
InchiKey: YIFFKQRYDMQYPQ-UHFFFAOYSA-N
Formula: C24H49NO
SMILES: CCCCCCCC(=O)N(CC(CC)CCCC)CC(CC)CCCC
Mol. weight [g/mol]: 367.65

Physical Properties

Property code	Value	Unit	Source
gf	128.18	kJ/mol	Joback Method
hf	-594.30	kJ/mol	Joback Method
hfus	55.49	kJ/mol	Joback Method
hvap	77.03	kJ/mol	Joback Method
log10ws	-7.73		Crippen Method
logp	7.608		Crippen Method
mcvol	360.570	ml/mol	McGowan Method
pc	842.60	kPa	Joback Method
rinpol	2368.00		NIST Webbook
rinpol	2368.00		NIST Webbook
tb	813.95	K	Joback Method
tc	997.09	K	Joback Method
tf	412.64	K	Joback Method
vc	1.391	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1168.08	J/mol×K	813.95	Joback Method
cpg	1190.12	J/mol×K	844.47	Joback Method
cpg	1211.01	J/mol×K	875.00	Joback Method
cpg	1230.80	J/mol×K	905.52	Joback Method
cpg	1249.54	J/mol×K	936.04	Joback Method
cpg	1267.28	J/mol×K	966.57	Joback Method
cpg	1284.08	J/mol×K	997.09	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=U308443&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