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

Inchi: InChI=1S/C20H41NO/c1-6-11-14-18(9-4)16-21(20(22)13-8-3)17-19(10-5)15-12-7-2/h18-1
InchiKey: ZXHLGQVRYKTEHM-UHFFFAOYSA-N
Formula: C20H41NO
SMILES: CCCCC(CC)CN(CC(CC)CCCC)C(=O)CCC
Mol. weight [g/mol]: 311.55

Physical Properties

Property code	Value	Unit	Source
gf	94.50	kJ/mol	Joback Method
hf	-511.74	kJ/mol	Joback Method
hfus	45.13	kJ/mol	Joback Method
hvap	68.13	kJ/mol	Joback Method
log10ws	-6.06		Crippen Method
logp	6.048		Crippen Method
mcvol	304.210	ml/mol	McGowan Method
pc	1067.27	kPa	Joback Method
rinpol	1959.00		NIST Webbook
rinpol	1959.00		NIST Webbook
tb	722.43	K	Joback Method
tc	894.87	K	Joback Method
tf	367.56	K	Joback Method
vc	1.167	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	919.32	J/mol×K	722.43	Joback Method
cpg	939.72	J/mol×K	751.17	Joback Method
cpg	959.13	J/mol×K	779.91	Joback Method
cpg	977.61	J/mol×K	808.65	Joback Method
cpg	995.18	J/mol×K	837.39	Joback Method
cpg	1011.88	J/mol×K	866.13	Joback Method
cpg	1027.74	J/mol×K	894.87	Joback Method

Sources

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=U308678&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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