Benzamide, 4-ethyl-N-butyl-N-3-methylbutyl-

Inchi: InChI=1S/C18H29NO/c1-5-7-13-19(14-12-15(3)4)18(20)17-10-8-16(6-2)9-11-17/h8-11,15
InchiKey: AWTCNEUGJPPLFW-UHFFFAOYSA-N
Formula: C18H29NO
SMILES: CCCCN(CCC(C)C)C(=O)c1ccc(CC)cc1
Mol. weight [g/mol]: 275.43

Physical Properties

Property code	Value	Unit	Source
gf	182.88	kJ/mol	Joback Method
hf	-240.12	kJ/mol	Joback Method
hfus	37.12	kJ/mol	Joback Method
hvap	67.00	kJ/mol	Joback Method
log10ws	-5.11		Crippen Method
logp	4.537		Crippen Method
mcvol	252.270	ml/mol	McGowan Method
pc	1524.69	kPa	Joback Method
rinpol	2604.00		NIST Webbook
rinpol	2604.00		NIST Webbook
tb	708.77	K	Joback Method
tc	903.58	K	Joback Method
tf	398.96	K	Joback Method
vc	0.954	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	722.40	J/mol×K	708.77	Joback Method
cpg	740.85	J/mol×K	741.24	Joback Method
cpg	758.24	J/mol×K	773.71	Joback Method
cpg	774.61	J/mol×K	806.17	Joback Method
cpg	790.03	J/mol×K	838.64	Joback Method
cpg	804.53	J/mol×K	871.11	Joback Method
cpg	818.16	J/mol×K	903.58	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=U415890&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