Benzamide, 4-butyl-N-tetradecyl-

Inchi: InChI=1S/C25H43NO/c1-3-5-7-8-9-10-11-12-13-14-15-16-22-26-25(27)24-20-18-23(19-2
InchiKey: PBRQXRXIMPKGRT-UHFFFAOYSA-N
Formula: C25H43NO
SMILES: CCCCCCCCCCCCCCNC(=O)c1ccc(CCCC)cc1
Mol. weight [g/mol]: 373.62

Physical Properties

Property code	Value	Unit	Source
gf	222.87	kJ/mol	Joback Method
hf	-393.38	kJ/mol	Joback Method
hfus	60.86	kJ/mol	Joback Method
hvap	87.36	kJ/mol	Joback Method
log10ws	-8.90		Crippen Method
logp	7.460		Crippen Method
mcvol	350.900	ml/mol	McGowan Method
pc	960.88	kPa	Joback Method
rinpol	3144.00		NIST Webbook
rinpol	3144.00		NIST Webbook
tb	907.10	K	Joback Method
tc	1111.26	K	Joback Method
tf	513.04	K	Joback Method
vc	1.369	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1163.38	J/mol×K	907.10	Joback Method
cpg	1182.74	J/mol×K	941.13	Joback Method
cpg	1200.90	J/mol×K	975.15	Joback Method
cpg	1217.94	J/mol×K	1009.18	Joback Method
cpg	1233.91	J/mol×K	1043.21	Joback Method
cpg	1248.90	J/mol×K	1077.24	Joback Method
cpg	1262.96	J/mol×K	1111.26	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407459&Units=SI
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

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