Benzamide, N,N-dioctyl-3-methoxy-

Inchi: InChI=1S/C24H41NO2/c1-4-6-8-10-12-14-19-25(20-15-13-11-9-7-5-2)24(26)22-17-16-18
InchiKey: PXDGOHQYNHCGMJ-UHFFFAOYSA-N
Formula: C24H41NO2
SMILES: CCCCCCCCN(CCCCCCCC)C(=O)c1cccc(OC)c1
Mol. weight [g/mol]: 375.59

Physical Properties

Property code	Value	Unit	Source
gf	130.84	kJ/mol	Joback Method
hf	-490.90	kJ/mol	Joback Method
hfus	57.38	kJ/mol	Joback Method
hvap	83.16	kJ/mol	Joback Method
log10ws	-7.60		Crippen Method
logp	6.858		Crippen Method
mcvol	342.680	ml/mol	McGowan Method
pc	1000.18	kPa	Joback Method
rinpol	2773.00		NIST Webbook
rinpol	2773.00		NIST Webbook
tb	868.91	K	Joback Method
tc	1066.15	K	Joback Method
tf	503.81	K	Joback Method
vc	1.313	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1111.53	J/mol×K	868.91	Joback Method
cpg	1130.82	J/mol×K	901.78	Joback Method
cpg	1148.90	J/mol×K	934.66	Joback Method
cpg	1165.84	J/mol×K	967.53	Joback Method
cpg	1181.68	J/mol×K	1000.40	Joback Method
cpg	1196.48	J/mol×K	1033.27	Joback Method
cpg	1210.28	J/mol×K	1066.15	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308154&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

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