Propanamide, N,N-dioctyl-3-cyclopentyl-

Inchi: InChI=1S/C24H47NO/c1-3-5-7-9-11-15-21-25(22-16-12-10-8-6-4-2)24(26)20-19-23-17-13
InchiKey: QYUZSVNGZUTUQG-UHFFFAOYSA-N
Formula: C24H47NO
SMILES: CCCCCCCCN(CCCCCCCC)C(=O)CCC1CCCC1
Mol. weight [g/mol]: 365.64

Physical Properties

Property code	Value	Unit	Source
gf	169.61	kJ/mol	Joback Method
hf	-523.26	kJ/mol	Joback Method
hfus	56.47	kJ/mol	Joback Method
hvap	78.06	kJ/mol	Joback Method
log10ws	-7.87		Crippen Method
logp	7.506		Crippen Method
mcvol	349.710	ml/mol	McGowan Method
pc	928.94	kPa	Joback Method
rinpol	2669.00		NIST Webbook
rinpol	2669.00		NIST Webbook
tb	830.11	K	Joback Method
tc	1018.79	K	Joback Method
tf	453.54	K	Joback Method
vc	1.345	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1162.05	J/mol×K	830.11	Joback Method
cpg	1184.16	J/mol×K	861.56	Joback Method
cpg	1205.06	J/mol×K	893.00	Joback Method
cpg	1224.80	J/mol×K	924.45	Joback Method
cpg	1243.44	J/mol×K	955.90	Joback Method
cpg	1261.05	J/mol×K	987.34	Joback Method
cpg	1277.69	J/mol×K	1018.79	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=U308286&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