Propanamide, 3-cyclopentyl-N-octadecyl-

Inchi: InChI=1S/C26H51NO/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-19-24-27-26(28)23-22-25
InchiKey: OIPGQWDCQPVPON-UHFFFAOYSA-N
Formula: C26H51NO
SMILES: CCCCCCCCCCCCCCCCCCNC(=O)CCC1CCCC1
Mol. weight [g/mol]: 393.69

Physical Properties

Property code	Value	Unit	Source
gf	165.06	kJ/mol	Joback Method
hf	-578.60	kJ/mol	Joback Method
hfus	63.73	kJ/mol	Joback Method
hvap	86.91	kJ/mol	Joback Method
log10ws	-9.32		Crippen Method
logp	8.335		Crippen Method
mcvol	377.890	ml/mol	McGowan Method
pc	836.28	kPa	Joback Method
rinpol	3182.00		NIST Webbook
rinpol	3182.00		NIST Webbook
tb	913.60	K	Joback Method
tc	1118.65	K	Joback Method
tf	496.27	K	Joback Method
vc	1.474	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1316.01	J/mol×K	913.60	Joback Method
cpg	1338.35	J/mol×K	947.78	Joback Method
cpg	1359.34	J/mol×K	981.95	Joback Method
cpg	1379.04	J/mol×K	1016.13	Joback Method
cpg	1397.54	J/mol×K	1050.30	Joback Method
cpg	1414.93	J/mol×K	1084.48	Joback Method
cpg	1431.27	J/mol×K	1118.65	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407389&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