Propanamide, 2-methyl-N-ethyl-N-octadecyl-

Inchi: InChI=1S/C24H49NO/c1-5-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-25(6-2)24(26
InchiKey: WPPKIFSTBSMKOO-UHFFFAOYSA-N
Formula: C24H49NO
SMILES: CCCCCCCCCCCCCCCCCCN(CC)C(=O)C(C)C
Mol. weight [g/mol]: 367.65

Physical Properties

Property code	Value	Unit	Source
gf	130.62	kJ/mol	Joback Method
hf	-589.02	kJ/mol	Joback Method
hfus	59.01	kJ/mol	Joback Method
hvap	77.42	kJ/mol	Joback Method
log10ws	-7.97		Crippen Method
logp	7.752		Crippen Method
mcvol	360.570	ml/mol	McGowan Method
pc	838.70	kPa	Joback Method
rinpol	1920.00		NIST Webbook
rinpol	1920.00		NIST Webbook
tb	814.39	K	Joback Method
tc	997.30	K	Joback Method
tf	427.64	K	Joback Method
vc	1.397	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1167.66	J/mol×K	814.39	Joback Method
cpg	1189.67	J/mol×K	844.88	Joback Method
cpg	1210.54	J/mol×K	875.36	Joback Method
cpg	1230.32	J/mol×K	905.85	Joback Method
cpg	1249.07	J/mol×K	936.33	Joback Method
cpg	1266.83	J/mol×K	966.82	Joback Method
cpg	1283.65	J/mol×K	997.30	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U415353&Units=SI

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