9-Octadecenamide

Other names:	Armid ow
	Armoslip cp
	9-Oleoamide
Inchi:	InChI=1S/C18H35NO/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18(19)20/h9-10H,2-8
InchiKey:	FATBGEAMYMYZAF-MDZDMXLPSA-N
Formula:	C18H35NO
SMILES:	CCCCCCCCC=CCCCCCCCC(N)=O
Mol. weight [g/mol]:	281.48
CAS:	3322-62-1

Physical Properties

Property code	Value	Unit	Source
gf	118.43	kJ/mol	Joback Method
hf	-376.42	kJ/mol	Joback Method
hfus	49.37	kJ/mol	Joback Method
hvap	73.01	kJ/mol	Joback Method
log10ws	-6.42		Crippen Method
logp	5.509		Crippen Method
mcvol	271.730	ml/mol	McGowan Method
pc	1299.53	kPa	Joback Method
tb	741.80	K	Joback Method
tc	923.30	K	Joback Method
tf	420.73	K	Joback Method
vc	1.058	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	815.07	J/mol×K	741.80	Joback Method
cpg	832.95	J/mol×K	772.05	Joback Method
cpg	849.95	J/mol×K	802.30	Joback Method
cpg	866.11	J/mol×K	832.55	Joback Method
cpg	881.48	J/mol×K	862.80	Joback Method
cpg	896.10	J/mol×K	893.05	Joback Method

cpg	910.01	J/mol×K	923.30	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=C3322621&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume