9-Octadecenamide, (z)-

Other names:	Adogen 73
	Oleamide
	Oleic acid amide
	Oleyl amide
	Slip-eze
	Armoslip CP
	Crodamide O
	Crodamide OR
	Amide O
	Diamide O 200
	Diamid O 200
	(Z)-9-Octadecenamide
	Armid O
	cis-9,10-Octadecenoamide
	Kemamide O
	Petrac Slip-Eze
	Unislip 1759
	9-Octadecenamide, cis-
	9-Octadecenamide, (9Z)-
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-KTKRTIGZSA-N
Formula:	C18H35NO
SMILES:	CCCCCCCC/C=C\CCCCCCCC(N)=O
Mol. weight [g/mol]:	281.48

Physical Properties

Property code	Value	Unit	Source
af	0.9263		Cheméo Relay (1.0)
gf	118.43	kJ/mol	Joback Method
hf	-541.61	kJ/mol	Cheméo Relay (1.0)
hfus	49.37	kJ/mol	Joback Method
hvap	107.38	kJ/mol	Cheméo Relay (1.0)
ie	9.19	eV	Cheméo Relay (1.0)
log10ws	-5.81		Cheméo Relay (1.0)
logp	5.509		Crippen Method
mcvol	271.730	ml/mol	McGowan Method
pc	1299.53	kPa	Joback Method

rinpol	2397.00		NIST Webbook
rinpol	2375.00		NIST Webbook
ripol	3265.00		NIST Webbook
ripol	3265.00		NIST Webbook
tb	596.77	K	Cheméo Relay (1.0)
tc	809.55	K	Cheméo Relay (1.0)
tf	349.05 ± 0.30	K	NIST Webbook
vc	1.020	m3/kmol	Cheméo Relay (1.0)

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

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C301020&Units=SI

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

af: Acentric Factor

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
ie:	Ionization energy
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume