

Tetradecanamide

Other names:	Myristamide Myristic acid amide Myristic amide Tetradecylamide
Inchi:	InChI=1S/C14H29NO/c1-2-3-4-5-6-7-8-9-10-11-12-13-14(15)16/h2-13H2,1H3,(H2,15,16)
InchiKey:	QEALYLRSRQDCRA-UHFFFAOYSA-N
Formula:	C14H29NO
SMILES:	CCCCCCCCCCCC(N)=O
Mol. weight [g/mol]:	227.39
CAS:	638-58-4

Physical Properties

Property code	Value	Unit	Source
gf	4.53	kJ/mol	Joback Method
hf	-411.08	kJ/mol	Joback Method
hfus	38.81	kJ/mol	Joback Method
hvap	64.14	kJ/mol	Joback Method
log10ws	-4.89		Crippen Method
logp	4.173		Crippen Method
mcvol	219.670	ml/mol	McGowan Method
pc	1676.91	kPa	Joback Method
rinpol	1921.00		NIST Webbook
rinpol	1921.00		NIST Webbook
tb	646.12	K	Joback Method
tc	823.44	K	Joback Method
tf	380.73	K	Joback Method
vc	0.855	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	687.99	J/mol×K	793.89	Joback Method
cpg	611.85	J/mol×K	646.12	Joback Method
cpg	628.58	J/mol×K	675.67	Joback Method

cpg	644.53	J/mol×K	705.23	Joback Method
cpg	659.74	J/mol×K	734.78	Joback Method
cpg	674.22	J/mol×K	764.33	Joback Method
cpg	701.09	J/mol×K	823.44	Joback Method
hsubt	167.40 ± 2.50	kJ/mol	311.50	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C638584&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
hsubt:	Enthalpy of sublimation at a given temperature
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

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