Propanamide, N-(n-decy)l-N-methyl-2,2-dimethyl-

Other names: Propanamide, N-decyl-N-methyl-2,2-dimethyl-
Inchi: InChI=1S/C16H33NO/c1-6-7-8-9-10-11-12-13-14-17(5)15(18)16(2,3)4/h6-14H2,1-5H3
InchiKey: ZSLCYXDLFLBYPU-UHFFFAOYSA-N
Formula: C16H33NO
SMILES: CCCCCCCCCCN(C)C(=O)C(C)(C)C
Mol. weight [g/mol]: 255.44

Physical Properties

Property code	Value	Unit	Source
gf	68.54	kJ/mol	Joback Method
hf	-427.37	kJ/mol	Joback Method
hfus	34.40	kJ/mol	Joback Method
hvap	58.70	kJ/mol	Joback Method
log10ws	-4.62		Crippen Method
logp	4.632		Crippen Method
mcvol	247.850	ml/mol	McGowan Method
pc	1398.55	kPa	Joback Method
rinpol	1834.00		NIST Webbook
rinpol	1834.00		NIST Webbook
tb	628.56	K	Joback Method
tc	801.43	K	Joback Method
tf	354.90	K	Joback Method
vc	0.945	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	687.70	J/mol×K	628.56	Joback Method
cpg	706.77	J/mol×K	657.37	Joback Method
cpg	724.91	J/mol×K	686.18	Joback Method
cpg	742.15	J/mol×K	714.99	Joback Method
cpg	758.55	J/mol×K	743.81	Joback Method
cpg	774.13	J/mol×K	772.62	Joback Method
cpg	788.95	J/mol×K	801.43	Joback Method

Sources

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=U308127&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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