Propanamide, N-decyl-N-methyl-2-methyl-

Inchi: InChI=1S/C15H31NO/c1-5-6-7-8-9-10-11-12-13-16(4)15(17)14(2)3/h14H,5-13H2,1-4H3
InchiKey: NLIUSBDPJBZECK-UHFFFAOYSA-N
Formula: C15H31NO
SMILES: CCCCCCCCCCN(C)C(=O)C(C)C
Mol. weight [g/mol]: 241.41

Physical Properties

Property code	Value	Unit	Source
gf	54.84	kJ/mol	Joback Method
hf	-403.26	kJ/mol	Joback Method
hfus	35.70	kJ/mol	Joback Method
hvap	57.38	kJ/mol	Joback Method
log10ws	-4.20		Crippen Method
logp	4.242		Crippen Method
mcvol	233.760	ml/mol	McGowan Method
pc	1491.89	kPa	Joback Method
rinpol	1788.00		NIST Webbook
tb	608.47	K	Joback Method
tc	777.41	K	Joback Method
tf	326.21	K	Joback Method
vc	0.893	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	630.33	J/mol×K	608.47	Joback Method
cpg	648.64	J/mol×K	636.63	Joback Method
cpg	666.13	J/mol×K	664.78	Joback Method
cpg	682.83	J/mol×K	692.94	Joback Method
cpg	698.76	J/mol×K	721.09	Joback Method
cpg	713.96	J/mol×K	749.25	Joback Method
cpg	728.43	J/mol×K	777.41	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=U308083&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