Propanamide, N,N-didecyl-2-chloro-

Inchi: InChI=1S/C23H46ClNO/c1-4-6-8-10-12-14-16-18-20-25(23(26)22(3)24)21-19-17-15-13-1
InchiKey: RSNTYEXEJHDLHX-UHFFFAOYSA-N
Formula: C23H46ClNO
SMILES: CCCCCCCCCCN(CCCCCCCCCC)C(=O)C(C)Cl
Mol. weight [g/mol]: 388.07

Physical Properties

Property code	Value	Unit	Source
gf	110.27	kJ/mol	Joback Method
hf	-584.12	kJ/mol	Joback Method
hfus	60.62	kJ/mol	Joback Method
hvap	79.58	kJ/mol	Joback Method
log10ws	-8.06		Crippen Method
logp	7.724		Crippen Method
mcvol	358.720	ml/mol	McGowan Method
pc	868.11	kPa	Joback Method
rinpol	2668.00		NIST Webbook
rinpol	2668.00		NIST Webbook
tb	828.94	K	Joback Method
tc	1015.27	K	Joback Method
tf	446.29	K	Joback Method
vc	1.391	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1140.69	J/mol×K	828.94	Joback Method
cpg	1161.39	J/mol×K	859.99	Joback Method
cpg	1180.99	J/mol×K	891.05	Joback Method
cpg	1199.53	J/mol×K	922.10	Joback Method
cpg	1217.08	J/mol×K	953.16	Joback Method
cpg	1233.68	J/mol×K	984.21	Joback Method
cpg	1249.40	J/mol×K	1015.27	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=U308392&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