Propanamide, N,N-didecyl-3-chloro-

Inchi: InChI=1S/C23H46ClNO/c1-3-5-7-9-11-13-15-17-21-25(23(26)19-20-24)22-18-16-14-12-1
InchiKey: GLHLCNPQGMVKTL-UHFFFAOYSA-N
Formula: C23H46ClNO
SMILES: CCCCCCCCCCN(CCCCCCCCCC)C(=O)CCCl
Mol. weight [g/mol]: 388.07

Physical Properties

Property code	Value	Unit	Source
gf	112.71	kJ/mol	Joback Method
hf	-578.84	kJ/mol	Joback Method
hfus	64.14	kJ/mol	Joback Method
hvap	79.97	kJ/mol	Joback Method
log10ws	-7.95		Crippen Method
logp	7.725		Crippen Method
mcvol	358.720	ml/mol	McGowan Method
pc	864.04	kPa	Joback Method
rinpol	2772.00		NIST Webbook
rinpol	2772.00		NIST Webbook
tb	829.38	K	Joback Method
tc	1015.54	K	Joback Method
tf	461.29	K	Joback Method
vc	1.397	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1140.25	J/mol×K	829.38	Joback Method
cpg	1160.93	J/mol×K	860.41	Joback Method
cpg	1180.52	J/mol×K	891.43	Joback Method
cpg	1199.07	J/mol×K	922.46	Joback Method
cpg	1216.64	J/mol×K	953.49	Joback Method
cpg	1233.27	J/mol×K	984.51	Joback Method
cpg	1249.03	J/mol×K	1015.54	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=U308509&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