Dichloroacetamide, N,N-didecyl-

Inchi: InChI=1S/C22H43Cl2NO/c1-3-5-7-9-11-13-15-17-19-25(22(26)21(23)24)20-18-16-14-12-
InchiKey: FJRVDNKXGHJTHQ-UHFFFAOYSA-N
Formula: C22H43Cl2NO
SMILES: CCCCCCCCCCN(CCCCCCCCCC)C(=O)C(Cl)Cl
Mol. weight [g/mol]: 408.49

Physical Properties

Property code	Value	Unit	Source
gf	89.92	kJ/mol	Joback Method
hf	-579.22	kJ/mol	Joback Method
hfus	62.23	kJ/mol	Joback Method
hvap	81.74	kJ/mol	Joback Method
log10ws	-8.29		Crippen Method
logp	7.900		Crippen Method
mcvol	356.870	ml/mol	McGowan Method
pc	899.10	kPa	Joback Method
rinpol	2687.00		NIST Webbook
tb	843.49	K	Joback Method
tc	1033.27	K	Joback Method
tf	464.94	K	Joback Method
vc	1.383	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1112.37	J/mol×K	843.49	Joback Method
cpg	1131.76	J/mol×K	875.12	Joback Method
cpg	1150.09	J/mol×K	906.75	Joback Method
cpg	1167.41	J/mol×K	938.38	Joback Method
cpg	1183.77	J/mol×K	970.01	Joback Method
cpg	1199.24	J/mol×K	1001.64	Joback Method
cpg	1213.87	J/mol×K	1033.27	Joback Method

Sources

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=U308639&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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