Methoxyacetamide, N,N-diundecyl-

Inchi: InChI=1S/C25H51NO2/c1-4-6-8-10-12-14-16-18-20-22-26(25(27)24-28-3)23-21-19-17-15
InchiKey: DXKSGJWDXHUJQF-UHFFFAOYSA-N
Formula: C25H51NO2
SMILES: CCCCCCCCCCCN(CCCCCCCCCCC)C(=O)COC
Mol. weight [g/mol]: 397.68

Physical Properties

Property code	Value	Unit	Source
gf	36.48	kJ/mol	Joback Method
hf	-736.60	kJ/mol	Joback Method
hfus	66.31	kJ/mol	Joback Method
hvap	82.44	kJ/mol	Joback Method
log10ws	-7.72		Crippen Method
logp	7.523		Crippen Method
mcvol	380.530	ml/mol	McGowan Method
pc	782.87	kPa	Joback Method
rinpol	2849.00		NIST Webbook
rinpol	2849.00		NIST Webbook
tb	860.13	K	Joback Method
tc	1054.08	K	Joback Method
tf	476.14	K	Joback Method
vc	1.478	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1266.05	J/mol×K	860.13	Joback Method
cpg	1288.62	J/mol×K	892.46	Joback Method
cpg	1309.90	J/mol×K	924.78	Joback Method
cpg	1329.92	J/mol×K	957.11	Joback Method
cpg	1348.75	J/mol×K	989.43	Joback Method
cpg	1366.43	J/mol×K	1021.76	Joback Method
cpg	1383.02	J/mol×K	1054.08	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308499&Units=SI
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

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