Methoxyacetamide, N,N-didecyl-

Inchi: InChI=1S/C23H47NO2/c1-4-6-8-10-12-14-16-18-20-24(23(25)22-26-3)21-19-17-15-13-11
InchiKey: JGYLYWVZTCJURY-UHFFFAOYSA-N
Formula: C23H47NO2
SMILES: CCCCCCCCCCN(CCCCCCCCCC)C(=O)COC
Mol. weight [g/mol]: 369.62

Physical Properties

Property code	Value	Unit	Source
gf	19.64	kJ/mol	Joback Method
hf	-695.32	kJ/mol	Joback Method
hfus	61.13	kJ/mol	Joback Method
hvap	77.99	kJ/mol	Joback Method
log10ws	-6.88		Crippen Method
logp	6.743		Crippen Method
mcvol	352.350	ml/mol	McGowan Method
pc	874.28	kPa	Joback Method
rinpol	2640.00		NIST Webbook
rinpol	2640.00		NIST Webbook
tb	814.37	K	Joback Method
tc	997.13	K	Joback Method
tf	453.60	K	Joback Method
vc	1.365	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1138.15	J/mol×K	814.37	Joback Method
cpg	1159.49	J/mol×K	844.83	Joback Method
cpg	1179.71	J/mol×K	875.29	Joback Method
cpg	1198.82	J/mol×K	905.75	Joback Method
cpg	1216.88	J/mol×K	936.21	Joback Method
cpg	1233.93	J/mol×K	966.67	Joback Method
cpg	1250.00	J/mol×K	997.13	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=U308498&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

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