Methoxyacetamide, N,N-diheptyl-

Inchi: InChI=1S/C17H35NO2/c1-4-6-8-10-12-14-18(17(19)16-20-3)15-13-11-9-7-5-2/h4-16H2,1
InchiKey: MZERXMLXTBCQGI-UHFFFAOYSA-N
Formula: C17H35NO2
SMILES: CCCCCCCN(CCCCCCC)C(=O)COC
Mol. weight [g/mol]: 285.47

Physical Properties

Property code	Value	Unit	Source
gf	-30.88	kJ/mol	Joback Method
hf	-571.48	kJ/mol	Joback Method
hfus	45.59	kJ/mol	Joback Method
hvap	64.64	kJ/mol	Joback Method
log10ws	-4.37		Crippen Method
logp	4.402		Crippen Method
mcvol	267.810	ml/mol	McGowan Method
pc	1270.06	kPa	Joback Method
rinpol	2037.00		NIST Webbook
rinpol	2037.00		NIST Webbook
tb	677.09	K	Joback Method
tc	844.54	K	Joback Method
tf	385.98	K	Joback Method
vc	1.030	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	773.75	J/mol×K	677.09	Joback Method
cpg	792.33	J/mol×K	705.00	Joback Method
cpg	810.08	J/mol×K	732.91	Joback Method
cpg	827.01	J/mol×K	760.81	Joback Method
cpg	843.16	J/mol×K	788.72	Joback Method
cpg	858.53	J/mol×K	816.63	Joback Method
cpg	873.16	J/mol×K	844.54	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308494&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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