Bromoacetamide, N,N-didecyl-

Inchi: InChI=1S/C22H44BrNO/c1-3-5-7-9-11-13-15-17-19-24(22(25)21-23)20-18-16-14-12-10-8
InchiKey: FPPRCDPCFMKQPQ-UHFFFAOYSA-N
Formula: C22H44BrNO
SMILES: CCCCCCCCCCN(CCCCCCCCCC)C(=O)CBr
Mol. weight [g/mol]: 418.50

Physical Properties

Property code	Value	Unit	Source
gf	130.54	kJ/mol	Joback Method
hf	-516.13	kJ/mol	Joback Method
hfus	62.64	kJ/mol	Joback Method
hvap	79.79	kJ/mol	Joback Method
log10ws	-7.81		Crippen Method
logp	7.491		Crippen Method
mcvol	349.890	ml/mol	McGowan Method
pc	976.56	kPa	Joback Method
rinpol	2776.00		NIST Webbook
rinpol	2776.00		NIST Webbook
tb	835.23	K	Joback Method
tc	1023.47	K	Joback Method
tf	479.90	K	Joback Method
vc	1.353	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1097.39	J/mol×K	835.23	Joback Method
cpg	1117.17	J/mol×K	866.60	Joback Method
cpg	1135.92	J/mol×K	897.98	Joback Method
cpg	1153.69	J/mol×K	929.35	Joback Method
cpg	1170.55	J/mol×K	960.72	Joback Method
cpg	1186.55	J/mol×K	992.10	Joback Method
cpg	1201.75	J/mol×K	1023.47	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308175&Units=SI

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