Methanesulfonamide, N,N-dihexyl-

Inchi: InChI=1S/C13H29NO2S/c1-4-6-8-10-12-14(17(3,15)16)13-11-9-7-5-2/h4-13H2,1-3H3
InchiKey: DRSQXCLVVHQBIB-UHFFFAOYSA-N
Formula: C13H29NO2S
SMILES: CCCCCCN(CCCCCC)S(C)(=O)=O
Mol. weight [g/mol]: 263.44

Physical Properties

Property code	Value	Unit	Source
gf	-299.18	kJ/mol	Joback Method
hf	-697.47	kJ/mol	Joback Method
hfus	43.82	kJ/mol	Joback Method
hvap	65.21	kJ/mol	Joback Method
log10ws	-3.66		Crippen Method
logp	3.409		Crippen Method
mcvol	232.100	ml/mol	McGowan Method
pc	1869.17	kPa	Joback Method
rinpol	1858.00		NIST Webbook
rinpol	1858.00		NIST Webbook
tb	557.06	K	Joback Method
tc	714.87	K	Joback Method
tf	307.30	K	Joback Method
vc	0.907	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	585.16	J/mol×K	557.06	Joback Method
cpg	603.00	J/mol×K	583.36	Joback Method
cpg	620.11	J/mol×K	609.66	Joback Method
cpg	636.51	J/mol×K	635.96	Joback Method
cpg	652.21	J/mol×K	662.27	Joback Method
cpg	667.23	J/mol×K	688.57	Joback Method
cpg	681.56	J/mol×K	714.87	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308430&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