Methanesulfonamide, N,N-bis(2-ethylhexyl)-

Inchi: InChI=1S/C17H37NO2S/c1-6-10-12-16(8-3)14-18(21(5,19)20)15-17(9-4)13-11-7-2/h16-1
InchiKey: GZOWNGFRNHVCFR-UHFFFAOYSA-N
Formula: C17H37NO2S
SMILES: CCCCC(CC)CN(CC(CC)CCCC)S(C)(=O)=O
Mol. weight [g/mol]: 319.55

Physical Properties

Property code	Value	Unit	Source
gf	-270.38	kJ/mol	Joback Method
hf	-790.59	kJ/mol	Joback Method
hfus	47.14	kJ/mol	Joback Method
hvap	73.34	kJ/mol	Joback Method
log10ws	-4.85		Crippen Method
logp	4.681		Crippen Method
mcvol	288.460	ml/mol	McGowan Method
pc	1391.25	kPa	Joback Method
rinpol	2052.00		NIST Webbook
rinpol	2052.00		NIST Webbook
tb	647.70	K	Joback Method
tc	810.47	K	Joback Method
tf	322.38	K	Joback Method
vc	1.119	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	809.09	J/mol×K	647.70	Joback Method
cpg	829.20	J/mol×K	674.83	Joback Method
cpg	848.41	J/mol×K	701.96	Joback Method
cpg	866.71	J/mol×K	729.08	Joback Method
cpg	884.14	J/mol×K	756.21	Joback Method
cpg	900.71	J/mol×K	783.34	Joback Method
cpg	916.45	J/mol×K	810.47	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308431&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