Benzenesulfonamide, 4-methyl-N-ethyl-N-decyl-

Inchi: InChI=1S/C19H33NO2S/c1-4-6-7-8-9-10-11-12-17-20(5-2)23(21,22)19-15-13-18(3)14-16

InchiKey: WXPHJAAOAQOVFF-UHFFFAOYSA-N

Formula: C19H33NO2S

SMILES: CCCCCCCCCCN(CC)S(=O)(=O)c1ccc(C)cc1

Mol. weight [g/mol]: 339.54

Physical Properties

Property code	Value	Unit	Source
gf	-145.88	kJ/mol	Joback Method
hf	-596.25	kJ/mol	Joback Method
hfus	53.02	kJ/mol	Joback Method
hvap	81.50	kJ/mol	Joback Method
log10ws	-5.81		Crippen Method
logp	5.146		Crippen Method
mcvol	292.880	ml/mol	McGowan Method
pc	1510.50	kPa	Joback Method
rinpol	2781.00		NIST Webbook
rinpol	2781.00		NIST Webbook
tb	726.00	K	Joback Method
tc	908.32	K	Joback Method
tf	413.86	K	Joback Method
vc	1.135	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	850.12	J/mol×K	726.00	Joback Method
cpg	869.18	J/mol×K	756.39	Joback Method
cpg	887.14	J/mol×K	786.77	Joback Method
cpg	904.05	J/mol×K	817.16	Joback Method
cpg	919.94	J/mol×K	847.55	Joback Method
cpg	934.82	J/mol×K	877.93	Joback Method
cpg	948.75	J/mol×K	908.32	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=U415280&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