2-Naphthalenesulfonanilide

Other names: 2-Naphthalenesulfonamide, N-phenyl-
Sulfone, anilino-2-naphthyl
Inchi: InChI=1S/C16H13NO2S/c18-20(19,17-15-8-2-1-3-9-15)16-11-10-13-6-4-5-7-14(13)12-16
InchiKey: NOZMNLZEWDUBJT-UHFFFAOYSA-N
Formula: C16H13NO2S
SMILES: O=S(=O)(Nc1ccccc1)c1ccc2ccccc2c1
Mol. weight [g/mol]: 283.35
CAS: 1576-48-3

Physical Properties

Property code	Value	Unit	Source
gf	26.53	kJ/mol	Joback Method
hf	-120.79	kJ/mol	Joback Method
hfus	38.38	kJ/mol	Joback Method
hvap	83.13	kJ/mol	Joback Method
log10ws	-4.78		Crippen Method
logp	3.641		Crippen Method
mcvol	207.390	ml/mol	McGowan Method
pc	3484.76	kPa	Joback Method
tb	740.75	K	Joback Method
tc	986.60	K	Joback Method
tf	459.36	K	Joback Method
vc	0.798	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	549.10	J/mol×K	740.75	Joback Method
cpg	563.64	J/mol×K	781.73	Joback Method
cpg	576.79	J/mol×K	822.70	Joback Method
cpg	588.65	J/mol×K	863.68	Joback Method
cpg	599.31	J/mol×K	904.65	Joback Method
cpg	608.87	J/mol×K	945.63	Joback Method
cpg	617.43	J/mol×K	986.60	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1576483&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume