Benzenesulfonamide, N-(phenylsulfonyl)-

Other names:	Dibenzenesulfonamide
	Benzenesulfonic acid imide
	Dibenzenesulfimide
	Dibenzolsulfimid
	Dibenzolsulfimide
	Dibenzenesulfonimide
	N-(phenylsulphonyl)benzenesulphonamide
Inchi:	InChI=1S/C12H11NO4S2/c14-18(15,11-7-3-1-4-8-11)13-19(16,17)12-9-5-2-6-10-12/h1-1
InchiKey:	OVQABVAKPIYHIG-UHFFFAOYSA-N
Formula:	C12H11NO4S2
SMILES:	O=S(=O)(NS(=O)(=O)c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	297.35
CAS:	2618-96-4

Physical Properties

Property code	Value	Unit	Source
gf	-572.71	kJ/mol	Joback Method
hf	-671.18	kJ/mol	Joback Method
hfus	42.77	kJ/mol	Joback Method
hvap	90.56	kJ/mol	Joback Method
log10ws	-2.84		Crippen Method
logp	1.354		Crippen Method
mcvol	198.580	ml/mol	McGowan Method
pc	5213.15	kPa	Joback Method
tb	673.05	K	Joback Method
tc	899.23	K	Joback Method
tf	407.62	K	Joback Method
vc	0.778	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	494.12	J/mol×K	673.05	Joback Method
cpg	508.55	J/mol×K	710.75	Joback Method

cpg	521.65	J/mol×K	748.44	Joback Method
cpg	533.45	J/mol×K	786.14	Joback Method
cpg	543.96	J/mol×K	823.83	Joback Method
cpg	553.21	J/mol×K	861.53	Joback Method
cpg	561.23	J/mol×K	899.23	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2618964&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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