N-phenyl-n-benzyl benzenesulfonamide

Inchi: InChI=1S/C19H17NO2S/c21-23(22,19-14-8-3-9-15-19)20(18-12-6-2-7-13-18)16-17-10-4-
InchiKey: NWEVQURHUSROFY-UHFFFAOYSA-N
Formula: C19H17NO2S
SMILES: O=S(=O)(c1ccccc1)N(Cc1ccccc1)c1ccccc1
Mol. weight [g/mol]: 323.41

Physical Properties

Property code	Value	Unit	Source
gf	88.57	kJ/mol	Joback Method
hf	-111.72	kJ/mol	Joback Method
hfus	41.49	kJ/mol	Joback Method
hvap	85.39	kJ/mol	Joback Method
log10ws	-4.98		Crippen Method
logp	4.082		Crippen Method
mcvol	245.360	ml/mol	McGowan Method
pc	2781.78	kPa	Joback Method
tb	774.38	K	Joback Method
tc	1020.18	K	Joback Method
tf	454.18	K	Joback Method
vc	0.919	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	679.29	J/mol×K	774.38	Joback Method
cpg	695.86	J/mol×K	815.35	Joback Method
cpg	710.74	J/mol×K	856.31	Joback Method
cpg	724.05	J/mol×K	897.28	Joback Method
cpg	735.90	J/mol×K	938.25	Joback Method
cpg	746.40	J/mol×K	979.21	Joback Method
cpg	755.65	J/mol×K	1020.18	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=B6002656&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