Benzene, 1,1'-[sulfinylbis(methylene)]bis-

Other names:	Benzyl sulfoxide
	Dibenzyl sulfoxide
	Tardiol D
	Sulfoxide, dibenzyl
	Dibenzyl sulphoxide
	Benzyl sulphoxide
	Preventol CI 5
	Bis(phenylmethyl) sulfoxide
	NSC 55
Inchi:	InChI=1S/C14H14OS/c15-16(11-13-7-3-1-4-8-13)12-14-9-5-2-6-10-14/h1-10H,11-12H2
InchiKey:	HTMQZWFSTJVJEQ-UHFFFAOYSA-N
Formula:	C14H14OS
SMILES:	O=S(Cc1ccccc1)Cc1ccccc1
Mol. weight [g/mol]:	230.32
CAS:	621-08-9

Physical Properties

Property code	Value	Unit	Source
gf	74.11	kJ/mol	Joback Method
hf	-64.97	kJ/mol	Joback Method
hfus	27.85	kJ/mol	Joback Method
hvap	64.04	kJ/mol	Joback Method
log10ws	-3.51		Crippen Method
logp	3.135		Crippen Method
mcvol	182.820	ml/mol	McGowan Method
pc	3038.96	kPa	Joback Method
tb	631.36	K	Joback Method
tc	874.46	K	Joback Method
tf	407.00 ± 3.00	K	NIST Webbook
tf	409.00 ± 2.00	K	NIST Webbook
tf	406.00 ± 4.00	K	NIST Webbook
vc	0.694	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	442.72	J/mol×K	631.36	Joback Method
cpg	459.78	J/mol×K	671.88	Joback Method
cpg	475.46	J/mol×K	712.39	Joback Method
cpg	489.82	J/mol×K	752.91	Joback Method
cpg	502.91	J/mol×K	793.42	Joback Method
cpg	514.81	J/mol×K	833.94	Joback Method
cpg	525.58	J/mol×K	874.46	Joback Method

Sources

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=C621089&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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