

Sulfone, bis(p-fluorophenyl)

Other names:	Benzene, 1,1'-sulfonylbis[4-fluoro- Bis(p-fluorophenyl) sulfone Bis(4-fluorophenyl)sulfone 4-Fluorophenylsulfone 4,4'-Difluorodiphenyl sulfone Sulfone, bis(4-fluorophenyl)- NSC 683542 NSC 87584 bis(p-fluorophenyl)sulphone
Inchi:	InChI=1S/C12H8F2O2S/c13-9-1-5-11(6-2-9)17(15,16)12-7-3-10(14)4-8-12/h1-8H
InchiKey:	PLVUIVUKKJTSDM-UHFFFAOYSA-N
Formula:	C12H8F2O2S
SMILES:	O=S(=O)(c1ccc(F)cc1)c1ccc(F)cc1
Mol. weight [g/mol]:	254.25
CAS:	383-29-9

Physical Properties

Property code	Value	Unit	Source
gf	-602.44	kJ/mol	Joback Method
hf	-686.46	kJ/mol	Joback Method
hfus	31.68	kJ/mol	Joback Method
hvap	65.18	kJ/mol	Joback Method
log10ws	-3.50		Crippen Method
logp	2.798		Crippen Method
mcvol	164.050	ml/mol	McGowan Method
pc	3572.80	kPa	Joback Method
tb	583.60	K	Joback Method
tc	800.99	K	Joback Method
tf	342.62	K	Joback Method
vc	0.653	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
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cpg	374.96	J/mol×K	583.60	Joback Method
cpg	388.76	J/mol×K	619.83	Joback Method
cpg	401.57	J/mol×K	656.06	Joback Method
cpg	413.42	J/mol×K	692.30	Joback Method
cpg	424.34	J/mol×K	728.53	Joback Method
cpg	434.34	J/mol×K	764.76	Joback Method
cpg	443.46	J/mol×K	800.99	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=C383299&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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