

Benzene, 1,1'-selenobis-

Other names:	(Phenylselenyl)benzene 1,1'-Selenobisbenzene Biphenyl selenide Biphenylselenium Difenylselenium Diphenyl selenide Diphenylselenium NSC 49758 Phenyl selenide Selenide, phenyl Selenium diphenyl
Inchi:	InChI=1S/C12H10Se/c1-3-7-11(8-4-1)13-12-9-5-2-6-10-12/h1-10H
InchiKey:	ORQWTLCYLDRDHK-UHFFFAOYSA-N
Formula:	C12H10Se
SMILES:	<chem>c1ccc([Se]c2ccccc2)cc1</chem>
Mol. weight [g/mol]:	233.17
CAS:	1132-39-4

Physical Properties

Property code	Value	Unit	Source
ie	7.79	eV	NIST Webbook
log10ws	-8.55		Crippen Method
logp	1.342		Crippen Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	116.70 ± 2.50	kJ/mol	313.00	NIST Webbook
hvapt	63.40	kJ/mol	477.00	NIST Webbook
hvapt	61.90	kJ/mol	476.50	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.58847e+01
Coeff. B	-5.96015e+03
Coeff. C	-4.56280e+01
Temperature range (K), min.	427.76
Temperature range (K), max.	609.33

Sources

The Yaws Handbook of Vapor Pressure:
Crippen Method:

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>
<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C1132394&Units=SI>

Legend

hsubt:	Enthalpy of sublimation at a given temperature
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
pvap:	Vapor pressure

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