

Silane, chlorodimethylphenyl-

Other names:	CP0160 Chlorodimethylphenylsilane Dimethylphenylchlorosilane Phenyl dimethylchlorosilane
Inchi:	InChI=1S/C8H11ClSi/c1-10(2,9)8-6-4-3-5-7-8/h3-7H,1-2H3
InchiKey:	KWYZNESIGBQHJK-UHFFFAOYSA-N
Formula:	C8H11ClSi
SMILES:	C[Si](C)(Cl)c1ccccc1
Mol. weight [g/mol]:	170.71
CAS:	768-33-2

Physical Properties

Property code	Value	Unit	Source
ie	9.30	eV	NIST Webbook
log10ws	-4.46		Crippen Method
logp	2.337		Crippen Method
rinpol	1099.30		NIST Webbook
rinpol	1099.30		NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	52.20	kJ/mol	384.50	NIST Webbook
hvapt	49.70	kJ/mol	384.50	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	355.00 ± 2.00	K	2.10	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.43848e+01
Coeff. B	-3.92289e+03
Coeff. C	-6.64800e+01
Temperature range (K), min.	344.75
Temperature range (K), max.	498.84

Sources

Crippen Method:	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=C768332&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Legend

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
rinpola:	Non-polar retention indices
tbrp:	Boiling point at reduced pressure

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