Trifluorophenylsilane

Other names: Phenyl trifluorosilane
Inchi: InChI=1S/C6H5F3Si/c7-10(8,9)6-4-2-1-3-5-6/h1-5H
InchiKey: KGWNTHHPMKEAIK-UHFFFAOYSA-N
Formula: C6H5F3Si
SMILES: F[Si](F)(F)c1ccccc1
Mol. weight [g/mol]: 162.18
CAS: 368-47-8

Physical Properties

Property code	Value	Unit	Source
ie	10.23	eV	NIST Webbook
log10ws	-4.19		Crippen Method
logp	1.741		Crippen Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	40.10	kJ/mol	306.50	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.74100e+01
Coeff. B	-5.11398e+03
Coeff. C	2.51400e+01
Temperature range (K), min.	263.00
Temperature range (K), max.	397.55

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C368478&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