P-xenyltrichlorosilane

Other names: p-Trichlorosilylbiphenyl
Inchi: InChI=1S/C12H9Cl3Si/c13-16(14,15)12-8-6-11(7-9-12)10-4-2-1-3-5-10/h1-9H
InchiKey: DHCRMIWRXITVBB-UHFFFAOYSA-N
Formula: C12H9Cl3Si
SMILES: Cl[Si](Cl)(Cl)c1ccc(-c2ccccc2)cc1
Mol. weight [g/mol]: 287.64
CAS: 18030-61-0

Physical Properties

Property code	Value	Unit	Source
log10ws	-7.69		Crippen Method
logp	4.216		Crippen Method
ss	328.80	J/mol×K	NIST Webbook
ss	328.78	J/mol×K	NIST Webbook
tt	372.90 ± 0.02	K	NIST Webbook
tt	372.90 ± 0.02	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	291.08	J/mol×K	298.15	NIST Webbook
cps	291.10	J/mol×K	298.15	NIST Webbook
hfust	18.57	kJ/mol	372.90	NIST Webbook
hfust	18.57	kJ/mol	372.90	NIST Webbook
hfust	18.57	kJ/mol	372.90	NIST Webbook
hvapt	75.70	kJ/mol	526.00	NIST Webbook
sfust	49.80	J/mol×K	372.90	NIST Webbook
sfust	49.80	J/mol×K	372.90	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C18030610&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cps:	Solid phase heat capacity
hfust:	Enthalpy of fusion at a given temperature
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
sfust:	Entropy of fusion at a given temperature
ss:	Solid phase molar entropy at standard conditions
tt:	Triple Point Temperature