Silane, chlorotriphenyl-

Other names:	Chlorotriphenylsilane
	Triphenylchlorosilane
	Triphenylsilicon chloride
	Triphenylsilyl chloride
Inchi:	InChI=1S/C18H15ClSi/c19-20(16-10-4-1-5-11-16,17-12-6-2-7-13-17)18-14-8-3-9-15-18/h
InchiKey:	MNKYQPOFRKPUAE-UHFFFAOYSA-N
Formula:	C18H15ClSi
SMILES:	Cl[Si](c1ccccc1)(c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	294.85
CAS:	76-86-8

Physical Properties

Property code	Value	Unit	Source
log10ws	-14.81		Crippen Method
logp	2.892		Crippen Method
rinpol	2191.00		NIST Webbook
ss	370.00	J/mol×K	NIST Webbook
tf	362.15 ± 1.50	K	NIST Webbook
tt	370.60 ± 0.20	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	337.60	J/mol×K	298.15	NIST Webbook
hfust	26.88	kJ/mol	370.60	NIST Webbook
hfust	26.88	kJ/mol	370.60	NIST Webbook
hfust	26.88	kJ/mol	370.60	NIST Webbook
sfust	72.53	J/mol×K	370.60	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	483.00	K	1.30	NIST Webbook

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C76868&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cps:	Solid phase heat capacity
hfust:	Enthalpy of fusion at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
rinpol:	Non-polar retention indices
sfust:	Entropy of fusion at a given temperature
ss:	Solid phase molar entropy at standard conditions
tbrp:	Boiling point at reduced pressure
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature