Octaphenylcyclotetrasiloxane

Other names:	Cyclotetrasiloxane, octaphenyl- Octaphenyltetracyclosiloxane 1,1,3,3,5,5,7,7-Octaphenylcyclotetrasiloxane CO9817 2,4,6,8-tetradiphenyl-[1,3,5,7,2,4,6,8]cyclotetrasiloxane
Inchi:	InChI=1S/C48H40O4Si4/c1-9-25-41(26-10-1)53(42-27-11-2-12-28-42)49-54(43-29-13-3-
InchiKey:	VSIKJPJINIDELZ-UHFFFAOYSA-N
Formula:	C48H40O4Si4
SMILES:	c1ccc([Si]2(c3ccccc3)O[Si](c3ccccc3)(c3ccccc3)O[Si](c3ccccc3)(c3ccccc3)O[Si](c3ccccc
Mol. weight [g/mol]:	793.17
CAS:	546-56-5

Physical Properties

Property code	Value	Unit	Source
log10ws	-35.35		Crippen Method
logp	5.093		Crippen Method
rinpol	4483.00		NIST Webbook
rinpol	4483.00		NIST Webbook
ss	1044.00	J/mol×K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	932.50	J/mol×K	298.15	NIST Webbook
hfust	1.26	kJ/mol	473.20	NIST Webbook
hfust	1.13	kJ/mol	475.00	NIST Webbook
hfust	1.95	kJ/mol	478.10	NIST Webbook

Sources

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

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C546565&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
ss:	Solid phase molar entropy at standard conditions