Hexamethyldisilazane

Other names:	((CH3)3Si)2NH
	1,1,1,3,3,3-hexamethyldisilazane
	1,1,1-Trimethyl-N-(trimethylsilyl)silanamine
	HMDS
	HMDS (silazane)
	NSC 93895
	OAP
	SZ 6079
	Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-
	TSL 8802
	Trimethyl-N-(trimethylsilyl)silanamine
	bis(trimethylsilyl)amine
	di(trimethylsilyl)amine
	disilazane, 1,1,1,3,3,3-hexamethyl-
	hexamethyldisilylamine
Inchi:	InChI=1S/C6H19NSi2/c1-8(2,3)7-9(4,5)6/h7H,1-6H3
InchiKey:	FFUAGWLWBBFQJT-UHFFFAOYSA-N
Formula:	C6H19NSi2
SMILES:	C[Si](C)(C)N[Si](C)(C)C
Mol. weight [g/mol]:	161.39
CAS:	999-97-3

Physical Properties

Property code	Value	Unit	Source
hvap	42.20 ± 0.90	kJ/mol	NIST Webbook
ie	8.55	eV	NIST Webbook
ie	8.79 ± 0.05	eV	NIST Webbook
ie	8.66	eV	NIST Webbook
log10ws	2.37		Crippen Method
logp	2.246		Crippen Method
rinpol	686.00		NIST Webbook
rinpol	717.00		NIST Webbook
rinpol	686.00		NIST Webbook
tb	397.20 ± 0.60	K	NIST Webbook
tb	399.00	K	NIST Webbook
tb	399.00	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	36.00	kJ/mol	344.50	NIST Webbook
pvap	31.34	kPa	360.50	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	4.36	kPa	312.40	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	10.30	kPa	331.80	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	23.41	kPa	352.70	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	45.32	kPa	371.80	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	1.51	kPa	290.80	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	2.68	kPa	301.50	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes

pvap	4.25	kPa	311.40	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	6.60	kPa	321.20	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	15.35	kPa	341.10	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	1.73	kPa	293.50	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	59.76	kPa	382.20	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	1.54	kPa	290.90	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	2.71	kPa	301.10	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	10.21	kPa	330.90	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	42.85	kPa	370.00	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes

pvap	30.30	kPa	360.30	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	20.68	kPa	349.80	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	14.79	kPa	340.10	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	9.72	kPa	329.70	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	5.93	kPa	320.20	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes
pvap	1.68	kPa	292.00	Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbp	397.45	K	96.60	Low cost apparatus for rapid boiling point determination of small air sensitive samples under inert atmosphere

Sources

Low cost apparatus for rapid boiling point determination of small air sensitive samples under inert atmosphere:	https://www.doi.org/10.1016/j.tca.2017.05.005
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C999973&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Synthesis and characterization of organosilicon compounds as novel precursors for CVD processes:	https://www.doi.org/10.1016/j.tca.2015.02.004

Legend

hvap:	Enthalpy of vaporization at standard conditions
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tbp:	Boiling point at given pressure