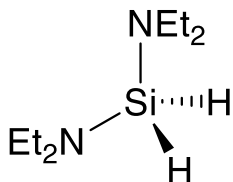


Catalog # 98-8810 Bis(diethylamino)silane, 99% (99.999%-Si) BDEAS; PURATREM



## Thermal Behavior:

- Melting point: <math>-10^{\circ}\text{C}</math> [1]
- Boiling point:  $188^{\circ}\text{C}$  [1]
- Vapor pressure: ~2 Torr at  $25^{\circ}\text{C}$ , 30 Torr at  $70^{\circ}\text{C}$ , ~100 Torr at  $100^{\circ}\text{C}$  [1-4]
- TGA plot and data is available in [1]

## Technical Notes:

1. ALD/CVD precursor for Si thin films

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
HfSiO <sub>x</sub>	ALD	70°C	-	Hf(NEt <sub>2</sub> ) <sub>4</sub> , O <sub>3</sub>	200-250°C	1
SiO <sub>2</sub>	PEALD	50°C	-	<sup>PL</sup> O <sub>2</sub>	50-400°C	3-4
	PEALD	-	3 Torr	<sup>PL</sup> O <sub>2</sub>	280°C	5
	ALD	-	10-20 Torr	O <sub>3</sub>	100-300°C	6
	ALD	55°C	-	O <sub>3</sub>	200°C	7
SiN <sub>x</sub>	PEALD	-	-	<sup>PL</sup> N <sub>2</sub>	225-375°C	8
	PEALD	60°C	0.3 Torr	<sup>PL</sup> N <sub>2</sub>	100-300°C	9
	PEALD	-	3 Torr	<sup>PL</sup> NH <sub>3</sub>	325°C	10

## References:

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