

# ELECTRONIC GASES

## SILANE $\text{SiH}_4$ MIXTURES

Silane can be diluted with argon, helium, hydrogen or nitrogen in order to provide concentrations of less than 100%. Using Silane in this form can add an additional degree of control to the process, particularly when relatively small amounts of silicon are to be deposited. All mixtures are analyzed prior to shipment to ensure that the concentration is in the range requested.

Silane mixtures are prepared as ordered. Concentrations other than those listed below are available upon request.

### Container Information

**CYLINDER CONNECTION:** std: CGA-350 opt: 632

**DOPING CONCENTRATIONS** can be mixed with UHP or VLSI grade balance gases

Silane concentration	Cyl size	Pressure (psig)	Argon		Helium		Hydrogen		Nitrogen	
			ft <sup>3</sup>	m <sup>3</sup>	ft <sup>3</sup>	m <sup>3</sup>	ft <sup>3</sup>	m <sup>3</sup>	ft <sup>3</sup>	m <sup>3</sup>
5 ppm - 10%	049	2100	270	7.64	235	6.65	235	6.65	250	7.08
	044	2000	227	6.43	199	5.63	199	5.63	210	5.95
	016	1800	75	2.12	66	1.87	66	2.12	70	1.98
	008	1800	34	0.97	31	0.87	31	0.87	33	0.92

**SHELF LIFE:** 2 years

### DOT Shipping Information

#### HYDROGEN BALANCE

Conc	Shipping Name	Shipping Papers	Shipping Labels
ALL	___% Silane/Hydrogen Mixture	Compressed Gases, flammable, nos (___% Silane/Hydrogen Mixture) 2.1 UN 1954	Flammable Gas
>1%	___% Silane/Hydrogen Mixture	Compressed Gases, flammable, nos (___% Silane/Hydrogen Mixture) 2.1 UN 1954	Flammable Gas
<1%	___% Silane/Hydrogen Mixture	Compressed Gases, nos (___% Silane/Hydrogen Mixture) 2.1 UN 1956	Nonflammable Gas