

ELECTRONIC GASES

DISILANE Si_2H_6 MIXTURES

Disilane can be diluted with argon, helium, hydrogen or nitrogen in order to provide concentrations of less than 100%. Using disilane in this form can add an additional degree of control to the process, particularly when relatively small amounts of silicon are to be deposited. Mixtures are analyzed prior to shipment to ensure that the concentration is in the range requested. Disilane mixtures are prepared as ordered. Concentrations other than those listed below are available upon request.

Container Information

CYLINDER CONNECTION: std: 350 opt: DISS-632

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

Disilane concentration	Cylinder size	Pressure (psig)	Argon ft ³ m ³	Helium ft ³ m ³	Hydrogen ft ³ m ³	Nitrogen ft ³ m ³
5 ppm - 2%	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

The pressures on higher concentration mixtures are lower than those shown above due to the fact that disilane has a low vapor pressure. Only a maximum amount can be put into a cylinder to avoid liquefaction of the disilane. To achieve higher concentrations, less balance gas is added.

SHELF LIFE: 1 year

DOT Shipping Information

HYDROGEN BALANCE

Conc	Shipping Name	Shipping Papers	Shipping Labels
All	___% Disilane/Hydrogen Mixture	Compressed Gases, flammable, nos (___ppm Disilane/Hydrogen Mixture) 2.1 UN 1954	Flammable Gas

Special note:

To the best of our knowledge, this compound is not on the current TSCA inventory and should be used for Research and Development purpose only as defined in EPA regulations in 40CFR Part 720.