DIETHYLTELLURIDE $(C_2H_5)_2$ Te MIXTURES

Diethyltelluride can be diluted with Hydrogen in order to provide concentrations of less than 100%. Using Diethyltelluride in this form can add an additional degree of control to the process, particularly when relatively small amounts of tellurium are to be deposited. Diethyltelluride mixtures are prepared as ordered. Concentrations other than those listed below are available upon request. All mixtures concentrations are guaranteed by weight.

Container Information

CYLINDER CONNECTION: CGA-350 / DISS-726

DOPING CONCENTRATIONS can be mixed with VLSI or ULSI grade Hydrogen

Diethyltelluride Concentration	Cylinder Size	Pressure psig	Contents ft^3	Contents m^3
50 ppm	044	1800	175	4.95
	016	1800	66	1.42

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

SHELF LIFE: 6 months

DOT Shipping Information

HYDROGEN BALANCE

Conc	Shipping Name	Shipping Papers	Shipping Labels
All	__ppm Diethyltelluride/Hydrogen Mixture	Compressed Gases, flammable, nos (__ppm Diethyltelluride/Hydrogen Mixture) 2.1 UN 1954	Flammable Gas

Physical Properties

Molecular Weight	185.73
Flammability Limits in air	Unknown-material can self-ignite in air
Vapor Pressure @ 20˚C	7.1 mm Hg
Density, Liquid @ 15˚C, 1 atm	13.36lbs/gal (1.6g/ml)
Boiling Point @ 1 atm	278.6˚F (137˚C)
Melting Point @ 1 atm	-20.6˚F (-29.2˚C)
Toxicity (as Te)	
TLV-TWA	0.1mg/m^3

Metals Specifications

ELEMENT	SYMBOL	TYPICAL
Aluminium	Al	< 100
Calcium	Ca	< 20
Chromium	Cr	< 50
Copper	Cu	< 10
Iron	Fe	< 7
Gallium	Ga	< 400
Germanium	Ge	< 10
Magnesium	Mg	< 3
Nickel	Ni	< 100
Silicon	Si	< 100
Tin	Sn	< 100

*all values in µg/g