DIMETHYLZINC $(CH_3)_2Zn$ MIXTURES

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

Description

CYLINDER CONNECTION: CGA-350
DOPING CONCENTRATIONS can be mixed with UHP or VLSI grade Hydrogen

Dimethylzinc Concentration	Cylinder Size	Pressure psig	Contents ft^3	Contents m^3
500 - 1100 ppm	049	2100	235	6.65
	044	1800	175	4.95
	016	1800	66	1.42
	008	1800	31	0.87

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

SHELF LIFE: 3 months

DOT Shipping Information

HYDROGEN BALANCE

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

Physical Properties

Molecular Weight	95.44
Flammability Limits in air	Pyrophoric
Vapor Pressure @ 20˚C	306 mm Hg
Density, Liquid @ 50.9˚F (10.5˚C), 1 atm	11.57lb/gal (1.386g/ml)
Boiling Point @ 1 atm	114.8˚F (46.0˚C)
Melting Point @ 1 atm	-20.6˚F (-29.2˚C)
Toxicity (as ZnO)	
TLV-TWA	5 mg/m^3
TLV-STEL	10 mg/m^3

Metals Specifications

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

*all values in µg/g