

# ELECTRONIC GAS

## TRIMETHYLBORON B(CH<sub>3</sub>)<sub>3</sub>

Trimethylboron is a pyrophoric, colorless, assumed to be toxic gas. It is used as a stable boron source for the simultaneous deposition of boron and carbon or as the boron source in BPSG deposition. It is usually shipped as a liquefied gas under its own vapor pressure.

### Container Information

CYLINDER SIZE	CONTENTS		Pressure @ 21.1°C Valve Outlet	45 psig CGA-350 / DISS-632
	LB	KG		
A030	13.2	6	DOT Shipping Description: DOT Shipping Labels DOT Guide No. CAS Registry No.	Trimethylboron, 2,3, UN 3160, Hazard Zone B Toxic Gas Flammable Gas 18 593-90-8
A007	4.4	2		
7X	150g			

### Specifications

COMPONENT TRIMETHYLBORON	ELECTRONIC 99.9% min
Carbon Dioxide	< 10 ppm
Dimethylethylboron	< 500 ppm
Nitrogen	< 10 ppm
Oxygen	< 1 ppm
THC (as Methane)	< 100 ppm
TMA	< 200 ppm

**SHELF LIFE:** 2 years

### Physical Properties

Molecular Weight	55.916
Flammability Limits in air / Autoignition Temperature	Not established / 130°F (54°C)
Specific Gravity, Gas @ 70°F(21.1°C), 1 atm(Air=1)	1.94
Density, Gas @ 70°F(21.1°C), 1 atm	0.144lbs/ft <sup>3</sup> (2.318g/l)
Specific Volume, Gas 70°F(21.1°C), 1 atm	6.92ft <sup>3</sup> /lb (0.431l/g)
Melting Point @ 75.1 psia (518 kPa)	-258.7°F (-161.5°C)
Boiling Point @ 1 atm	-4.4°F (-20.2°C)
Toxicity TWA	7 ppm