

# ELECTRONIC GASES

## GERMANE $\text{GeH}_4$

Germane is a colorless, odorless, highly toxic and flammable gas. It may spontaneously ignite in air. It is compatible with hydrogen, argon, helium, and nitrogen, and is often shipped as a mixture with these gases. Germane is normally shipped as a free gas, due to the quantities involved, instead of as a liquefied gas under its own pressure.

### Container Information

CYLINDER SIZE	CONTENTS	Pressure@21.1°C Valve Outlet	150 psig CGA-350
	GRAMS		
044	1700	DOT Shipping Description:  DOT Shipping Labels DOT Guide No. CAS Registry No.	Germane, 2.3, UN 2192 Poison-Inhalation Hazard Hazard Zone B  Poison Gas, Flammable Gas 18 1590-87-0
008	250		
7X	17		

### Specifications

COMPONENT	UHP
GERMANE	99.999%min
Carbon Dioxide	< 2 ppm
Carbon Monoxide	ND< 1 ppm
Digermane	< 20 ppm
Nitrogen	< 5 ppm
Oxygen + Argon	< 1 ppm
THC (as Methane)	< 1 ppm
Trigermane	ND< 1 ppm

**SHELF LIFE:** 1 year

### Physical Properties

Molecular Weight	76.62
Flammability Limits in air	Unknown
Specific Gravity, Gas @ 70°F(21.1°C), 1 atm(Air=1)	2.66
Density, Gas @ 70°F(21.1°C), 1 atm	0.199lbs/ft³ (3.19kg/m³)
Specific Volume, Gas @ 70°F(21.1°C), 1 atm	5.03ft³/lb (0.313l/g)
Melting Point @ 75.1 psia (518 kPa)	-266.76°F (-165.98°C)
Boiling Point @ 1 atm	-127.3°F (-88.5°C)
Critical Temperature	94.7°F (34.8°C)
Critical Pressure	805.3 psia (55.5 bar)
Toxicity	
TLV-TWA	0.2 ppm
LC <sub>50</sub>	50 ppm